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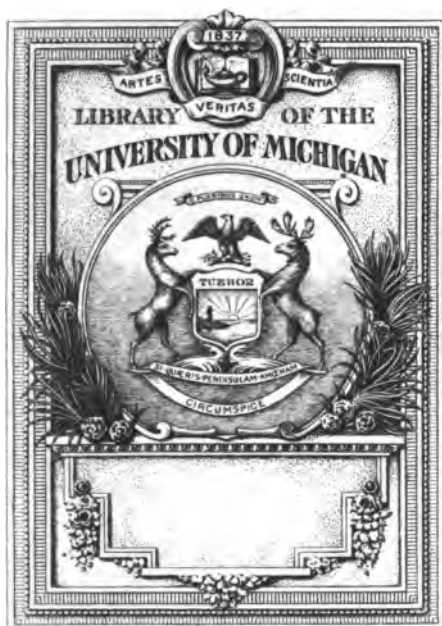
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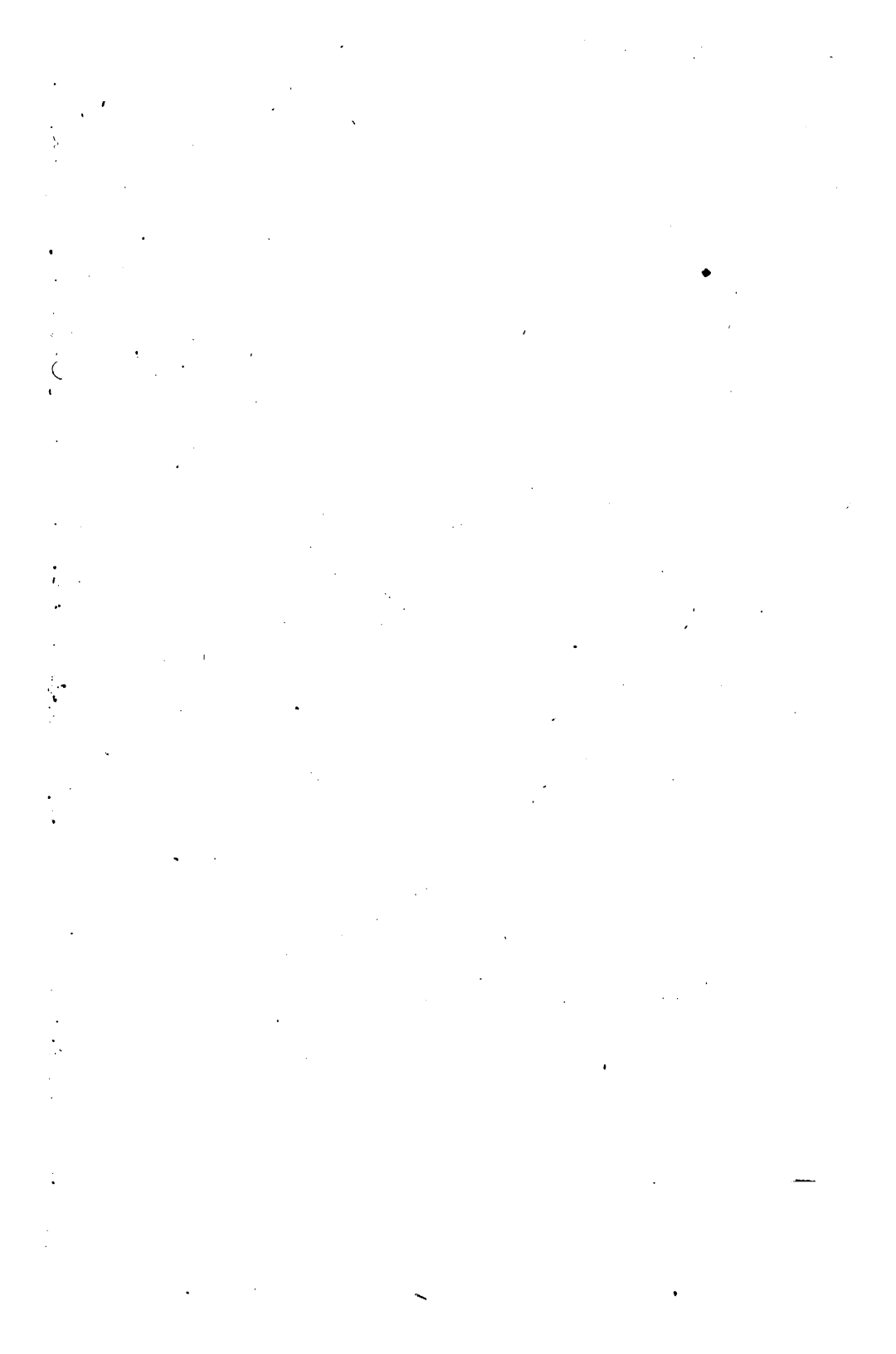


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HANDLING MEN

**SELECTING AND HIRING
HOW TO HOLD YOUR MEN
BREAKING IN AND DEVELOPING MEN
PUTTING MORE THAN MONEY
IN PAY ENVELOPES**



A. W. SHAW COMPANY
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PART I—SELECTING AND HIRING

My Measure of Success

THE architect and executive who design and direct and yet strive to do the bricklaying, will advance not far and will quickly wear out.

One who has the faculty for right selection of responsible subordinates needs also that wise sense of justice and appreciation which accords unstinted scope of action and generous recognition of results.

The proverbial reluctance to allow those to enter the water whom we would have swim has given short measure to many a success.

A good executive finds, develops and leans upon those who can carry forward for him the increasing divisions of his single great work.

In all work, as in all knowledge, there is unlimited room for expansion and advancement. The business pyramid will find no circumscribing dome above which it cannot lift its capstone.

Therefore, granted breadth of field and the leader's personal equation, the degree and height of business mastery and success will accord absolutely with the number and efficiency of the supporting body of workers.

And the executive will have the deserved praise and reward of one whose admirable work has been to lead, to develop, to render productive; to add to the commonwealth of brain and things and character.

A handwritten signature in dark ink, reading "John H. Swamaker". The signature is written in a cursive style with a large, stylized initial "J".



JOHN WANAMAKER

President, The Wanamaker Stores

I

HOW WE LIFTED HIRING OUT OF THE RUT

By A. K. Baer,

Secretary-Treasurer, Strouse-Baer Company

BALTIMORE is quite a center for the manufacture of wearing apparel. These factories use women employees almost exclusively. The increased productions that have been made necessary by the increased demand for merchandise recently have compelled all manufacturers to have their plants running to capacity, and, in a great number of instances, additions have been made which also called for enlarged forces. This condition was made more serious by the fact that there has been an unusual increase in new factories in the same line.

To secure sufficient workers, who are to some degree experienced, has produced a bid for them by every factory in the city. These appeals have heretofore been made in the usual stereotyped way in the want columns of the various newspapers. In fact, there are at all times and have been for quite a number of years, "Help Ads" of this character appearing nearly every day in these columns, so when workers were looking for positions they saw the same sort of appeals by any number of manufacturers, and therefore, these "ads" became commonplace.

One month we had continuous want ads running in the classified columns of the daily papers, and our total

results in applications which were accepted were only six, upon an expenditure approximately of one hundred and twenty-five dollars. Our business has expanded to such an extent that it was necessary for us to increase our production thirty-three per cent, which means that we had to put in sixty additional machines. With the experience of our previous month's advertising for help staring us in the face, and knowing that we had to fill up our new plant within a very short period, we were confronted with a serious problem. Our solution was an advertising campaign which is along lines quite different from those usually followed in employment "ads." It has been highly satisfactory, for by it we have filled up our entire plant with experienced help.

Everybody sells his product by telling about it—by pointing out why the buyer should purchase, by showing him the advantages that go with the goods. Why shouldn't we use these common-sense methods when we hire workers? Why not give them reasons why the employment we have to offer is desirable? Why not "sell" our good working conditions as we sell goods? This line of thought seemed reasonable. But how should it be done? If a person is out hunting for employment and must have it, you get him to come to you by the stereotyped want ads. But you can't do much toward creating a particular desire to work for you on the part of the prospective employee in the uniform type and narrow confines of a classified ad in the daily papers.

So we decided to do some pioneer work. We took approximately half pages in the Sunday papers for three successive weeks. This gave us ample room to tell why our factory is a good place to work in. Good ventilation and heating, excellent lighting facilities and clean, convenient rest rooms in a fireproof building—these are

points about our factory that we pointed out in each advertisement.

"What's in the pay envelope, week after week?" is a question every applicant is going to ask in one form or another, so we headed one of our advertisements that way and then by a table showed in dollars and cents exactly what eight representative operators earned during each of seven specific weeks. We compared the wages our girls make with those earned by the average operator. But skyrocket wages over a brief period are of little interest if they are eaten up by slack periods, so we brought out the uniformity of employment in this sentence, "There has been no slack season in more than three years—no operators have been laid off for lack of work—every operator has had full time." "Two-thirds of the operators who were here when we began over three years ago are here now," is another fact we thought worth bringing out in the advertisement, because, after all, "the proof of the pudding is in the eating."

HOW the attractiveness of working conditions can be played up to advantage in "help wanted" copy and attract employees of a high standard.

We have new machines and keep them maintained in the best of condition. We thought this well worth mentioning, for it has a bearing on an employee's output and earning power. And we didn't forget pictures. Photographs do much in visualizing conditions, and we made ample use of them in these advertisements. We showed not only our workrooms, but individual pictures of a half dozen of our operators under the caption, "We Want More Operators Like These."

The psychological effect of these advertisements upon the girls and women who are required to earn a livelihood has been unusual, for it brought to the notice of a great portion of prospectives, the possibility of earning salaries in excess of what can be obtained in other lines of female endeavor, such as office workers or shop girls. It must be further taken into consideration that the element of foreign female help in Baltimore is almost a nonentity, and factory work to a great portion of American girls bears almost the same stigma as that of a housemaid. It is, therefore, necessary to consider our advertising for help as sort of an educational campaign, in connection with a direct appeal for experienced help.

Within our plant as well we have taken steps to build up our working force. We have posted in prominent places in the workrooms signs headed, "Help yourself by helping us." The announcement itself is made up of an offer of ten dollars to any employee who secures the services of three experienced operators and three dollars for one skilled operator. This is provided the operators thus obtained remain in our employ at least three months.

It is difficult to say whether the sort of an appeal made in our special advertising campaign for workers could be used generally. A campaign of this sort would necessarily depend upon individual conditions. But in our case it has done what we hoped it would do. It has given us a full quota of employees of a high standard.



ONE reckless workman has time and again spoiled the "safety first" spirit of a whole shop, while a run of accurate and fine work has more than once toned up careless habits throughout—has made better workmen and cut inspection costs.

HARRY A. WHEELER,
Vice-President of the Union Trust Company, Chicago

II

LIVING UP TO YOUR EMPLOYMENT SYSTEM

By Carroll D. Murphy
Based on an Extensive Investigation

AUDITING employment conditions at the branch sales offices had kept the traveling "trouble man" of a big implement concern in upper Missouri territory for three full weeks. He had examined new and seasoned salesmen, had held training conferences, had checked personal sales records, had called in and lunched with the star men and "trailers" from odd corners of the field. In every way possible under his authority, he had standardized the employment routine of the branch and had brought it into line with home office policy. Yet in his primary mission he had failed—failed because the employment system of which he was a part was incomplete.

In his pocket he carried a telegram ordering him to run in from Denver and find why upper Missouri sales showed a slump. And having found the trouble, he had found also that he lacked the power to meet it.

"You've decided to give Wilson that new agency?" he inquired with pretended confidence, as he sat closeted with the branch manager on the last night of his stay.

"I'm firing Wilson tomorrow," was the curt reply.

"But he's your oldest man and the best salesman on your payroll. He knows that territory as no one else

does. He has earned the promotion and to push him out instead of giving it to him will discourage your whole force. The home office has noticed the difference already. In fact, I don't see how you personally can afford to let him out. He has worked up his trade to \$8,000 and \$10,000 months when his nearest man runs \$3,500. To lose him will cut down your bonus and spoil the record of the branch."

"I won't have Wilson around," said the branch manager with finality.

"Suppose you hold him over a couple of weeks and recommend him for some other territory. He's too valuable a man to let go. I'll report him in and have him shifted," the adjuster suggested.

"I'm firing him," was the answer, doggedly given.

Next day the adjuster brought Wilson's case before the division sales manager in charge of ten branches covering several of the prairie states. He explained that the salesman's record was sound; that there were no specific charges against Wilson; that the dismissal of the man who was in line and the promotion of a favorite would surely spread discontent throughout the field force. The division manager, however, held that it would be a mistake for him to interfere with the branch manager's policy—would make him "responsible for any bad luck the branch might strike."

WAYS to lessen the friction in handling men which often develops through office politics or through an employee's fear of the other fellow "getting his job".

Ten days later the trouble man laid the case before the general sales manager. "Our employment plan is incomplete," he said, "unless we back up our bonus system of payment with an employment committee and

arbitration board or some home office check on politics in the branches."

The sales manager stared out of the window for a full minute, then shook his head. "The only thing I could do," he declared, "would be to remove both the division and the branch manager. Wilson isn't worth it, good salesman as he is."

What this scheme of employment lacked was a means or method of enforcing its provisions. Hiring standards, merit standards, contests and enthusiasm-getting schemes had all been worked out on a fair-weather basis. If the one responsible at each point had been entirely sound, the plan would have worked. But it lacked that final, positive authority which urges or forces every man to keep to the rules in time of stress because a bigger power in the company will bring him back to them if he takes any byroad of carelessness, selfishness or favoritism.

Ask the enthusiastic employment chief who has told you his hobbies in man-handling this plain question: "Does it work—does your employment system as a whole satisfy you?" Never is the answer an unqualified "yes." Various plans are shrewd in making men and managers observe the routine of hiring, discipline or payment. But we have not yet worked out any system so complete and well balanced that it does not break down somewhere in time of trouble. What every manager is looking for is an employment plan which will work to the rules as closely as the checking system in the average bank and at the same time not create a spirit of discontent among the workers.

Just as the bank's checking rules fall into groups of essentials, so you can put on the fingers of one hand the five essentials of labor buying:

(1) An employment bureau, which shall look out for the labor supply, keep the best men available and put each new workman where he fits.

(2) A staff or instruction plan for training and developing your workers.

(3) A system of records and conferences to get a fair decision on every man's ability.

(4) A method of shifting men to put ability on its most productive basis.

(5) Such rules as to pay, promotions, and other rewards as will stimulate everyone to do his best at each stage of his development.

After the rules, card forms, positions and methods have been worked out, however, the sixth essential—the power that clinches these fingers into a solid grip on progressive employment policy—is the provision which the management makes to guard these rules and methods from neglect at all points. As the bank says:

“These things will be done because no payments will be made otherwise,” so the manager must be assured that no variation from his plans can pass unchallenged.

Most employers recognize that friction in handling the force focuses at certain points. The hiring department in a big public service company, for example, has a complete routine for the picking of good men, but the spirit of personal enthusiasm and responsibility behind the plan has gone out—the man at the first desk, where sixty per cent of all who apply could economically be rejected, is dispirited, routine-ridden, weak in his judgments of men.

Rulings that urge the training of men are found frequently to induce friction; the man who should be developing new material for various places is “afraid of his job.” He tries to make an extra showing of economy

or of personal ability and so crowds down or neglects his men that his staff is constantly crumbling to pieces. Investigation of the city sales office of a computing machine company showed that salesmen had often been driven away by the office manager's eagerness to credit himself with telephone sales from the territory assigned to these men. The illness of an estimator in a contracting company brought out the fact that for three years he had been holding back the coaching he had promised to an assistant. At one time he was too busy, at another his place seemed too uncertain, and again he had a friend in mind for the opening and so neglected his first duty.

METHODS *for building a strong and enthusiastic working force by detecting and eradicating weak points in the employment system.*

Such fears, rivalries and cases of neglect dot most organizations and become centers of disloyalty. Yet simple foresight and the common-sense application of yesterday's experience will quickly tell any employer just where his employment plan needs to be reenforced.

The president of one \$50,000 concern has been able to build up a strong and enthusiastic corps of workers simply because he tactfully anticipates and quietly avoids friction in the enforcement of his employment scheme. The need developed for a new department head in this company. The president wished to make it a rule that promotions be awarded to the present employees best fitted for it, yet he foresaw that several executives would begrudge him certain able assistants.

In fairness to the men who had earned advancement and to the heads, who might be prejudiced by their own convenience, therefore, the president adopted the prac-

tice of dropping in upon the department work and studying the fitness of the men in line for the vacancy. When he had practically chosen an assistant from the sales department, he went to the sales manager, told him of the vacancy and asked him to suggest several candidates for it. The sales manager, knowing that his superior was familiar with the abilities of his men, had no course but to suggest frankly that his assistant might fit in. Repeated conferences took up the promotion from various angles, and made the sales manager feel that he was making a voluntary contribution to the personnel of the concern, in return for which his employer was not only giving him full credit, but was cooperating in the effort to fill the assistant's place and thus minimize the inconvenience to the department. Against the selfish instincts of the department head, this employer matched these stronger motives so tactfully as to inspire him enthusiastically to stand by a promotion on which the spirit of the younger workers in the concern depended.

In a similar way every threatened point in a scheme of employment can be safeguarded. Question your employment system frankly: Does it work? Where does it generate friction? How can it be made trouble-proof? In answer you can blue-pencil on the chart of your organization these spots where fear of personal disadvantage, hostility between men, favoritism, self-importance, ignorance, neglect, snap judgment, overwork or an unbalanced plan of payment threatens to make the bearings "smoke."

Against every one of these dangers the wide awake manager has installed some more or less automatic safety device. The employment schemes which are most successful focus certain duties upon each worker, inspire him with a sure reward for his service and after thus

reenforcing instruction with inspiration, assure him that his record is under inspection constantly and that he is being graded fairly for both failures and successes.

To be ready for difficulties is the essence of a strong man-handling plan. Every belt and pulley of employment routine needs back of it both a regular and an emergency engine. Not only to insure him that he gets a fair return for his wage, but also to protect him from favoritism in the department, the employee must be left no excuse of ignorance as to his duty, and at least two independent forces in the company must report separately as to his efficiency. This plan holds for the individual, the department head, the employment sub-committee or arbitration board and the employment manager.

In a small factory reports on costs and output, together with shrewd personal contact, tell the higher officials from day to day how the department heads are observing the rules and holding their subordinates up to the plan. As an inducement to the workers to check upon this information, an annual bonus has been arranged which reaches the older and more trusted employees. Every spring the management announces to its men that it has set aside a certain unpublished percentage of the profits to be made in the next twelve months, for distribution according to wages among the employees who have long been in the service of the company. About one third of the employees receive this bonus, and so completely has it won their cooperation that upon every nook and corner of the factory they focus eyes watchful for friction in the handling of help.

In a suit-making plant the management gets independent reports on employment conditions from three different centers of responsibility. The regular em-

ployees are made accountable for all new workers by a provision that no hiring shall be done except on the recommendation of steady help. Every case of lateness, absence or continued inefficiency is also investigated in a thorough way and from time to time must be reported in outline to the management. The usual output reports keep the management in touch with efficiency in the shop, and the independent view from a third angle comes through the work of a woman disciplinarian, responsible to the management and in constant touch with the factory force.

In another and larger concern, a complete labor department has been organized where, through complaint and suggestion boxes, foremen and workers can file their respective cases, throwing light from two angles on conditions in the plant and leading to corrections needed. Under this plan discharges were cut to ten per cent of the total under a former routine. A board of arbitration, in which both department heads and employees are represented, acts as a court of appeal from labor department decisions, and has worked out a code by which the labor department is guided.

HOW *a special investigation at stated intervals can be used to bring to light mistakes in hiring, abuse of the promotion power, and the like.*

In another concern, no man can be retained in one department for more than three years without bringing, by automatic follow-up, a special investigation. At this time the employee's record is brought out and the whole situation comes under scrutiny. Mistakes in hiring, neglect of training, wrong judgment of the man and abuse of the promotion power thus come to correction. Whenever a vacancy occurs, moreover, the employment

committee of this company, perhaps in the most unexpected way, brings out the records of all men in a department, calls various chiefs into conference and thus, as often as vacancies occur, makes a special test of employment conditions.

Enforcing an employment system predicates that information on every point shall come from several angles surely and often to the man most interested in the success of the business. By getting this routine on paper, the prime mover can enforce a simple automatic follow-up. This is the method in use by a New York publishing house with branches all over America. In the manager's office, agency difficulties have been reduced to a series of charts or "trouble sheets." The branch manager is constantly in touch with the house by reports on sales, collections, expense and man-handling. When a sales report shows a slump, the general manager checks down his "sales trouble sheet" and, by correspondence or if necessary by personal conference, puts a finger on his man's difficulty. Branch managers soon come to know that they are on their record—that what they do is in the lime light and that their faults will be known just as surely as their difficulties and efforts.

In order further to emphasize the rules without offending the field men, the financial reports sent in by different branches are scored and reported weekly as a base ball contest, in which the winning team is the one doing the best business for the week. The branch manager's personal reports are developed into humorous but straight-from-the-shoulder comment. Checking back upon the branch manager and his men at a different angle from that of his immediate superior, come this bulletin and a weekly statement showing each man just how his work compares with that of the other men. This

double attack rouses the ambition of managers and men, and makes them clamor for suggestions from the trouble sheet at the home office.

The unorganized factory force has as many conflicting interests as the arrows that dot a weather map. Resourceful employers find plans to line up these interests for a time and make them all run parallel with the success of the house. The tactful paymaster appeals to the personal advantage and success of the individual and so stimulates him to contribute to the success of the house. He shows the worker that his own failure threatens whenever he threatens the welfare of the concern. He appeals to the caution and the pride of his man. But his system is often only a matter of enthusiasm; his team is held together but temporarily and by the force of his personality, unless he inserts at every important friction point in his employment scheme a make-sure clause—an emergency engine which is bound to put through the routine if the regular power goes off. Small details are entered by a subordinate, whose reports are verified through an independent source. Step by step the details are cleared away and the essentials of the system focused, until finally the employer or general manager gets the essential proofs that the routine is running smoothly.

The best of employment schemes will not win the workman's respect, inspire his confidence and get results without the driving force and will power of the employer steadily behind it. spurts of man-handling punctuated by forgetfulness will not succeed. Employment is an executive task which demands regular hours, a place on the calendar, perpetual responsibility on the part of those immediately in charge and periodical attention from the manager. Because wages are only an

external check on men, the wise employer goes beyond his pay roll auditor, makes someone responsible for personal supervision of every employment detail, and sets a second agent to audit and correct the other's errors and personal equation. The trouble sheet and the employer's reports close the magnetic circuit of efficient work.



EFFICIENCY like an invention always comes to an individual, never to a committee or to an organization, and the weakness of cooperative production is the undervaluation of the individual, the manager who develops efficiency in other men. In most spheres of action and in the economic world in particular, some men are much more efficient than others. Some men possess much more ability than the majority of their fellows and among this higher class there are varying degrees of efficiency. Modern industry has been developed through the invention of efficient machinery. Man efficiency, however, is today of far greater importance than the further development of efficiency in machinery, the greatest problem before us today is not so much the further improvement of machinery, but the development of an increased efficiency in men."

JAMES LOGAN,

Chairman of the Board and General Manager
of the United States Envelope Company

III

WHEN YOUR MEN HELP YOU HIRE

By Charles Harris

Based on an Extensive Investigation

ONE of the most successful engineers I ever knew attributed most of his own success to the class of help he had been able to employ for his department and, indirectly, to a policy he had long followed in the selection of his assistants.

His policy really came about through accident originally. It was some time before he analyzed the situation and applied the policy in an intense and unvarying fashion. In the beginning, he had happened to get a capable man or two from this school and they, in turn, had recommended others from time to time. Finally he came to a realization of the fact that he was depending to a marked degree on the men from this school. He thought the matter over and awoke to the value of his "discovery."

"Capable men can distinguish capable from incapable people among their friends," he said. "Moreover, a capable man will, as a rule, have capable men for his friends. I would therefore rather hire men on the recommendation of my more capable men than through any other source. As to the men from this particular school, I know full well that there are other schools in the country as good. Probably some are better. I used

to believe that this school's training, some way, peculiarly fitted men for my business. But that is not true—decidedly not true.

“My success with these men has been because the men I had, being capable, knew and recommended capable people. Moreover, there has always been a sort of ‘community of responsibility’ among the employees from this school. Every man from the institution is proud of the record of every other man in the department from the same school. The older men will sort of ‘father’ a new man from the school—will help him with infinite patience. Thus, from a class of many students and one teacher, at the school, the new man comes into a class of one student and several interested and very practical teachers here.”

This is one man's interesting formula for obtaining good help, applicable, apparently, to his line, but not applicable in the cases of the great mass of employees. However, at least a part of the plan is being applied right now, in the selection of women employees for one of the largest pharmaceutical manufacturing houses in the country. In the city where this company's chief plant is situated, it is known as a place which attracts unusually high class employees, both men and women.

The whole success of the company in this particular, according to its president, has come from the logic that “nice people will have nice friends.” It has, therefore, been the policy of the various department foremen, in seeking new help, to ask the more capable employees if they do not have friends who would like to work at the factory. It is naturally necessary that “nice people” should be well treated, though they are really not unusually well paid. The desirable people in the plant remain, also, through the fact that the other people are

"nice people"—the sort of people who are agreeable to them as associates. The very reputation of the factory as a pleasant place to work, has of itself become a valuable word-of-mouth advertisement for capable people. In this case, the treatment of the employees is a matter of great importance, of course, as in every such plan, but it is never the effort of the company to start with a decidedly incapable person.

I know the manager of a garment factory which employs women almost exclusively, and whose employees are known as the best in the city where his company operates, as the result of close attention to the two ideas of careful selection and careful treatment of the employees selected. Like many other lines employing women, it is the rule of the trade that employees are prone to go from shop to shop, often for no very apparent reason. "Just want to change," in fact, is often as much as the manager can get from such an employee.

I*N THIS case real interest in the worker's personal comfort paid dividends in good will. How welfare work without "frills" is conducted.*

Several years ago, this manager decided to turn this trait to his own advantage and determined to keep, permanently, a greater proportion of the really capable people who came from time to time than he should lose. "We have made a careful study of the comfort of our girls," he said, "and of their feelings. We give especial attention to the more capable ones, of course. This policy goes far beyond the maintenance of our dining room for employees—far beyond the annual dinner and the dances we allow them to have here. It goes into their everyday routine work. We let it be known that we do not want a girl in this factory who has to be railed

at. We have cool-headed girls—employees who, when they feel they have been unfairly treated, will nevertheless talk the matter over in a cool way. We let it be known that we will protect the rights of the girls and that we are very much interested, also, in our own rights as employers. The result is that they understand us and we understand them in an unusual way. We are getting and holding the better class of employees, and we are getting out more work, mechanical equipment and floor space considered, than we used to be able to turn out.”

This manager, with the company many years, believes that fully half the women are older in the service than he, and many of them have been there for more than twenty years. He takes into account, also, the fact that one of the big considerations an employee gives a prospective place of employment is the question of the wages possible to earn, and inasmuch as practically all the labor is paid by the piece, his policies in this particular have been of great help. He has tried to make it possible for the women to make more.

For example, he found occasionally what seemed to him to be a needlessly large investment in stock in process of making. His investigation showed this condition to be due to the fact that there were occasional variations in the working forces of the several departments—old employees were away, less capable substitutes were working, and so on. Such a condition was bad for the factory and bad for the women alike. He made inquiry in the various departments as to people who could do the work of other departments in an emergency, many in the past having changed from one department to another. He then made sure that the girls understood that the plan he had in mind would

be good for them as well as for the owners, and suggested that certain employees form a sort of reserve, in case of such emergencies, for work in congested departments.

Now, if Department No. 1 is about to swamp Department No. 2, so that employees of Department No. 1 may have to be laid off, and Department No. 3, No. 4 and so on, are working short time because the goods are accumulating in Department No. 2, girls who know the work of Department No. 2 are sent into that work from various departments until the situation is relieved and the equilibrium reestablished. The result is that the employees of the various departments make more money. The girls were quick to see this, and there was practically no trouble, anticipated before the plan was tried, with girls who had for one reason or another preferred the department of current steady employment. They were willing to go temporarily to their old employment for the good of the force generally.

In such matters as a better standardization for buttonhole markings, this manager has also gained the favor of his employees. In another case, a small machine was devised to cut elastic used for overalls into uniform lengths with an automatic cutter, thus making assembling easier for those who handle the elastic—and, incidentally, saving the company much money.

This manager believes that too many executives only see in such improvements the advantages which come to the company and fail to recognize the benefit which can come to the employees and which, when it is brought adroitly to their attention, will make them feel in a more kindly way toward the company. "When we have an opportunity to improve a method," he said, "there are two things that appeal to me most strongly.

In the first place, how will the change make us money? In the second place, how can the girls be shown that the change will be good for them?"

He often goes through the factory on deliberate tours of "friend-making," stopping often for a moment's chat with the more capable women, discussing the machines with them, assuring this operator of a button-hole machine that he will have a man from the factory to look at it, requesting that the other girl use one of the extra bench machines until the guard on her machine can be repaired—taking, in other words, a personal interest in the work, earnings and safety of each girl, and letting her know of his interest.

In a somewhat similar way, a manufacturer who maintains a dining room for his employees makes the dining room pay unusually large "dividends in good will" from his working people by frequently going about the dining room, very much as the proprietor of a public eating house often does, asking about the food and the service with real concern. "How's that new pastry cook, John? Like her pies?" is bound to make John understand that the owner is really interested in him, and to give the man a better understanding of the fact that the dining room is the result of a real interest in the employees. This man believes that a factory dining room, without a sufficient amount of "host and guest" relationship, is quite as bad as a hotel or restaurant that lacks this element of personal interest. This employer has always been known as "a good man to work for" and has been able to employ and keep help above the average because of his policies.

In a clothing factory where many women are employed, and where a somewhat similarly careful attitude is maintained toward the employees as a means of

attracting the best obtainable, an interesting method is used for increasing the popularity of the dining room.

It was found that employees in some of the departments furthest removed from the factory dining room would bring cold lunches and go to the dining room to eat them rather than to wait in the long line. The remedy was the dismissal of the four chief departments five minutes apart. Thus, there is much less waiting in line. The departments, of course, return to work at the end of the noon hour in the same time relationship. Nearly twenty-five per cent more are served with warm food. "There are times," the owner of this plant said, "when it is wise to be especially careful with help. One of those times is when the employees are hungry."

This owner probably summed the whole story into a few words when he said: "Pay? It has been the 'making' of our business. You will not find a cleaner, brighter or more capable set of people anywhere than we have right here. What has it cost? Nothing, practically, in dollars and cents. It has been, chiefly, a matter of thoughtfulness—of attitude. A little real consideration, particularly in time of fatigue or physical distress, counts for more than all the frills that can be injected into so-called 'welfare' work that is lacking in this element."



SUCCESSFUL operation of any business—manufacturing, wholesale, retail—requires exact information about every detail of the business. The information must be obtained cheaply and simply, but it must be complete enough and detailed enough to give the executives who are responsible for the operation of the business exact knowledge of its every detail.

CHARLES R. STEVENSON,
General Manager, National Veneer Products Company

IV

THE MAN FOR THE JOB

By Carroll D. Murphy

Based on an Extensive Investigation

TWO men met at the revolving door of a downtown restaurant. They shook hands and the older led the way to a table. As they took off their overcoats and settled into chairs, he eyed his companion with keen fixity.

"Well," said he, "you're the man for me. You live up to your telephone voice." The younger man looked incredulous.

"What do you know about me?" he inquired with amusement. "We've exchanged letters, made a telephone appointment and spent three minutes together. Doubtless some of my friends have told you the customary lies about my accomplishments. Three weeks ago you had never heard of me."

"Precisely—as precisely as I should have expected you to draw a summary," agreed the other. "Let's get down to terms——" And a bargain was struck which brought the concern a most valuable employee.

"Tell me how you did it," urged the younger man, as they sat smoking after the meal. "What do you know about me—how did you get a line on me? Although your proposition looks good, I am not sure that I can handle it. I have never turned my hand to that sort of thing. Aren't you taking a big risk?"

"What do I know about you?" the older man para-

phrased. "I know that I have been hiring salesmen for twelve years and studying my man. I know that I have been selling specialties to business men for sixteen years—and studying my man. I know that you have the salesman in your signature, in the way you phrase a letter, in your voice, in the way you carry yourself, in your hands, in your eyes, in the shape of your head, in your nose, lips and chin. I know things about you that you think are secrets from your closest friends. I know, you see, things that you don't know yourself. There are labels all over a man's appearance and actions; for sixteen years I have been learning how to read those labels."

STUDY and standardization of the requirements of both the job and the man bring a knowledge of the required average, which is essential to accurate hiring.

Such judgment of capacity may be intuitive, or it may be the trained and experienced character-reading ability which this sales manager used so confidently. In cases where the employer has made character reading an intelligent study, astonishing results are sometimes secured. And it means dollars and cents to a concern.

A \$25,000 salary represented the eagerness of a big corporation in its search for an efficient factory head. The man whose resignation it had requested had been paid a salary and perquisites worth close to \$32,000. Although a shrewd organizer, accurate as an astronomer and economical as a Yankee in his factory operation, this superintendent had still lacked one quality—that of enlisting the enthusiasm of his department heads and men. The new superintendent must have magnetism as

APPLICATION FOR EMPLOYMENT		
Name in full _____		Date _____ 19__
Address _____		
Date of birth _____	Nationality _____	Married or single? _____
What public school did you attend? _____	When graduated? _____	
What high school did you attend? _____	When graduated? _____	
What college did you attend? _____	When graduated? _____	
What course did you take? _____	Kind of work wanted _____	
Have you any physical defects? _____ Wages or salary expected _____		
Give the names of the firms for which you have worked, beginning with the first and naming the last to date.	Kind of business	What salary or wages did you receive?
Name of last employer _____		
Address _____		
Why did you leave? _____		
Name _____		
Address _____		
Why did you leave? _____		
Name _____		
Address _____		
Why did you leave? _____		
Name _____		
Address _____		
Why did you leave? _____		
Name _____		
Address _____		
Why did you leave? _____		
Have you ever been employed by this company? _____ What position? _____		
Have you any relatives in the employ of this company? _____		
If so, give names _____		
Introduced to this company by _____		
REFERENCES		
Name	Address	Business
<div style="display: flex; justify-content: space-between; margin-top: 10px;"> Date assigned _____ Department _____ </div>		
READ RULES ON OTHER SIDE		

FORM 1: *Specific questions and successive dates, used with clearness and simplicity, have made this employment application blank successful in a large manufacturing concern. This form was adopted after it was found that workers objected to filling out more lengthy blanks*

well as the desirable traits of the man who was stepping out.

Big cities were vainly searched for a man of the right caliber. One evening at a public dinner, an official of the corporation met a factory man whose bearing and conversation suggested him for the place. Studying his face, form, voice and manner, the executive decided that here was the man of balance and poise to take over the management of the plant. Following up the lead next day, he found that his new acquaintance's record and experience bore out the first impressions. Testing him thoroughly, he hired him, and within three months had the gratification of seeing him "fit in" with decisive success.

Behind the selections made by these employment officials lies a principle in the handling of men which, properly developed, is enabling employers to choose workers with something like certainty. By years of study, the sales manager had *standardized* the requirements of his field and the inner significance of men's outward characteristics. The official who determined in an hour across a dinner table that a well-groomed neighbor could fill a \$25,000 position, was guided by more scientific standards as to human traits and their outward evidence. In both instances, keen study had set down specifications for the position and interpreted the language which a man's life writes upon his hands, into his penmanship, upon his face and form, in his words and actions.

With a third employer, mere repetition—recognition of the *average* which stands out from judging one type of employee for only two or three kinds of work thousands of times, brings the same result. He is expert in deciding between girls of the nervous type and steady

workers who settle down when the rush hour comes and handle the work point by point regardless of how fast it pours in.

Standardization—this knowledge of the average both in jobs and in men—is essential to accurate hiring of help. *Personal error always figures in any one man's idea of what a position requires*, and where the manager is out of touch with his departments or the merchant believes that making change is the chief mission of the worker behind a counter, this error will be costly. *Another error always discounts a man's judgment of his own or another's ability*. Several definite, easy and practical ways have been found to set up standards that guard against these "personal equations" in judging positions and applicants.

The superintendent of a little factory, who had worked out an informal standard of ability for various positions, had written and advertised widely for a subordinate to study and report conditions about the plant. In his letters, he gave a detailed description of the man he was looking for, enumerating the different duties and qualities required. From a mass of human material, he chose a man whose interesting and orderly application, favorable character, appearance, experience and willingness to adapt himself, seemed ideal.

"How did this appeal to you? What was your angle on the situation?" were questions which the employer put to his new inspector day after day with regard to factory problems.

"Well, the foreman said—"

"Never mind what others said—what were the facts? What was your conclusion?"

"Why, the men I talked with laughed at the idea."

"Yes, but what were the facts?"

But the answer was always second-hand. He took no decided personal stand.

Three months later the employee was asked to resign. He and his employer had both been mistaken in working out standards by which to measure a man for the inspectorship. He had turned out to be a collector of interested opinions, not facts.

Naturally independent in his own thinking, the superintendent had felt a special liking for the worker who easily agreed. In checking over the loss of the promising apprentice he hit upon his error. One essential of the position he had not realized; that it required a man who could see things through his own eyes, accept information as opinion rather than fact, weigh points independently, see conditions clearly and bring an outside judgment to bear on the point at issue.

Going to his files, the employer drew out the duplicate letter in which he had tersely put his description of the position and to the qualifications there noted, added the words, "Independent in judgment."

The man whom he next employed had frankly disagreed on several points that came up in the first interview. He accepted only what he saw through his own eyes. Hired by the qualifications his employer had developed in three months' study of the work, he proved to be just the man for the place.

A *PLAN for standardizing requirements for every position and predetermining the necessary qualifications. How the hit-or-miss element is eliminated.*

Standardized requirements for every position are the basis of one employment plan, to which hundreds of office and factory workers look for places, promotions and recognition of efficiency.

An employment committee with a permanent secretary presides over the system. This body first held sittings and called in different department heads throughout the concern, in groups of three or four. In this way it got on paper the requirements of all places, the value of the work done, the faults of average workers and every vital point brought up by foremen or officials. "Specifications" were then informally drawn for all routine places; and these positions were arranged in definite grades to determine rank. Department heads were often called back for a second conference. The committee invited "house" criticism of the plan. Finally, after a searching comparative check, the whole scheme was put into force.

Its immediate advantages were these:

1. Department heads gained precise ideas as to the requirements of each worker's job, the output they should expect and get, and the training they should give employees.

2. Efficiency—a large initial saving and fairly uniform justice among employees—replaced the haphazard inefficiency which had been clogging the man-machine during fifty years of irregular growth.

In this plan, provision is made to keep the standard up to date. The employment committee, always informally in session, immediately considers and records changed working needs. Vacancies are filled by promotion whenever possible, the department head in conference with the committee choosing the best man from the next lower grade. What each position demands is thus standardized, put on record and revised in repeated consultation. At least two trained officials check the requirements of every place and the capacities of every man in this great establishment.

"When a department head needs a factory hand, a shipping clerk, an accountant, a stenographer or a draftsman," said the employment manager of another concern which has similarly standardized methods of handling more than ten thousand workers, "he fills in this card (page 41) covering the man who is leaving, and sends it to my department with a requisition for the new workman. My assistants have been chosen for a natural aptitude in handling men and have personally studied the requirements of most positions. The foreman's statement serves as a further reminder and source of information, if the new man is needed to replace one leaving. Every ex-employee's history goes into our files, so that we have in the department complete records of the men selected for positions, including current reports on such men and final reports on all former employees or men once refused as undesirable. With all this data as to the man needed, we select the most suitable man available and send him to the foreman to refuse or approve (without absolute veto)."

The merchant with two or three clerks on his pay roll and the manufacturer who employs but a score of men, are finding it worth while to standardize their positions by the same principles and plans here described:

1. Put into writing the qualifications of the position as you know it.
2. Have the men closest to that work check on your specifications.
3. Study similar work and workers in other concerns.
4. Check over and adjust all positions in the direction of definite standards.
5. With every experience which shows you some new requirement of the position or some chance to economize by doing away with what has been considered a require-

ment, revise your written estimate of the place and its duties.

6. Consciously measure applicants by these standards.

By this simple routine, developed in both progressive large and small organizations, the business man handles the hiring of men with accurate knowledge of the places to be filled. Against the haphazard choice of his neighbor who is merely "looking for a man," he can match precise place specifications based on averages developed in his years of experience with employment problems at many desks.

When a skilled buyer asks producers for bids on his needs, he does not trust entirely to his personal choice between values. Not only has he standardized his demands, but he has also worked out methods, tests and comparisons between the various competing products so that before buying he *knows* precisely which are his best all-around investments.

THE *successful employer of labor trains himself to recognise certain characteristics in men and backs his personal judgment by a law of averages.*

Successful employers are equipping themselves similarly for buying labor. Your personal estimate of an applicant, whether for the vacant place behind the counter in a twenty-foot shop or for one of a hundred positions in a twenty-acre factory, need no longer be merely intuitive or reiterative. Your personal judgment of capacity can have the background of averages. To a marked degree you can train yourself by practicing the interpretation of characteristics which mark men of various traits and types.

"Work out these ten problems," said an employment official of a Chicago factory to three boys applying for

work as office beginners. Twenty minutes later, one of the boys handed in a neat and fairly accurate paper. The second applicant's return represented nearly an hour's hard work. The third boy furtively eliminated himself, proving in the least expensive way that his intelligence was limited. Compared with the employment man's standards or day-by-day averages on applicants, the time required to finish gave a line on each youngster's mental alertness.

Equally tell-tale was the manner of solving the problems. The first three questions were elementary and the second boy, coming to them with fresh enthusiasm, solved them correctly. Nor was he caught napping when, after figuring the fourth problem throughout in pounds, he was required in the fifth to shift, reducing pounds and tons to a common term. Of the several ways to make such calculations, however, his solution lacked the originality, independence and directness which more self-reliant applicants often show.

Quizzing the applicant as to his experience, record and ambitions has become a formality as meaningless as the stock circular or the form letter. One man of wide experience at the employment desk questions "whether one in a hundred application blanks is truthfully and correctly filled out. Not merely does the applicant often intentionally deceive, but more often he leaves blanks, fails to understand what is wanted or finds an easy way to evade unfavorable answers. In many cases, too, intelligent and independent mechanics get out of patience trying to fathom the obscure queries and quit in disgust."

Requests for a list of previous employers, merely as an example, are often so vague that the applicant can begin and leave off where he pleases; or can fill the entire

space with names of transient employers and omit vital facts.

The first step in the routine of hiring a workman in one metropolitan concern is to have him fill out a carefully arranged application blank, shown on page 33, on which definite queries and specific data appear as a

EX-EMPLOYEE'S RECORD						
To Employment Dept. No.		Date			Last day worked	
Clock No.		Name				
Address						
Reason for leaving		Character of service				Reinstatement
Own accord			Good	Fair	Unsatisfactory	No objection
Leave of absence		Work				Do not re-employ for this department, for reasons given below
Laid off		Conduct				
Dismissed		Ability				
Discharged		Class of work performed				
Remarks (Give complete information concerning reason for leaving)						
Signed		Foreman Dept. No.				
This coupon must be detached by the foreman and sent at once under cover to the Employment Department						

FORM II: This report card acts as a check on the employee who is leaving. It gives the employment department an up-to-date glimpse of the place to be filled, as well as an instant record should the worker ask for reinstatement at any time

check on the writer's attention, thoroughness and accuracy. An experienced man then interviews him. This official was himself chosen with these requirements in view: (1) ability to concentrate, (2) ability to observe accurately, (3) power of analysis, (4) capacity to receive and remember many details, (5) resource in testing, checking and drawing conclusions, (6) acquaintance with the requirements of the positions to be filled.

On his desk, this official has cards filled with data as to the standards fixed for the vacant positions. He has

made a detailed study of different human types, characteristics and traits, so that he can apply a mental tape measure to the applicant on every essential quality.

In the employment official's mind, as in that of the buyer, the requirements which the vacancy makes upon the applicant range in precise order, from absolute qualifications as regards age, health, mental power and physical strength, through the variables of education, experience, wages wanted and practical aptitudes. By checking the points *in this order*, the official eliminates the impossible applicant instantly and saves time in which to weigh more carefully applicants who are "running close."

First comes eye judgment of the man; then a study of the written application; and finally, the personal interview, checking up the accuracy and completeness of the written statements—developing in a subtle way the temperament, experience, aptitudes and ambitions of the workman.

Many concerns require promising applicants to pass a physical examination before they are hired. Others are attempting to interpret with certainty the character labels of physical form, physiognomy and the like. Handwriting contains dozens of different suggestions working towards an accurate impression of the writer. In several concerns, the handwriting on application blanks is studied for these involuntary character labels. Every experienced employer has his favorite tests, sample tasks and trick problems to develop the true fitness of his man for his place. The psychological laboratory furnishes interesting tests in the attempt to get away from a personal equation and standardize judgment on applicants. Combine the best from these various tests and the pay roll is relieved of a weight of error.

The employment department of a manufacturing concern needed an assistant. An applicant appeared at the office for the position. The employment chief applied his tests—judgment of face and form—study of the application blank—personal conference. The applicant was shrewd, yet he failed in a surprising way to draw mature conclusions. The employer felt that there was excellent material in the man, if it could be classified and fitted into the organization. He took the applicant into his private office and had him work out in great detail a statement of his previous positions and what he had there observed. To his surprise, his man came through with an almost photographic record. So long as only facts, not judgments, were in question, the man was unerring. He was appointed to inspect and report on conditions in the various branch houses, and is doing good work.

The most precise of employers are coming to lay more emphasis also on the worker's physical make-up. One chain of retail stores has every likely applicant submit to a thorough physical examination, governed by certain rules as decisive as those of life insurance. This retail organization, moreover, keeps medical and surgical service in waiting on its employees at all times, believing that no man can give value or grow up to his opportunities without health. Neglect of the cold, the headache or the foot that irritates the clerk's temper, are subjects for reprimand. A great factory organization carries the principle further and requires physical examination of all routine employees four times every year.

In an agricultural implement factory capitalized at millions, the provisions for physical test before employment are as follows: All applicants after passing the department quiz and signing up for work, are put

through a preliminary examination for defects in attitude, sight, alcoholism and other evident diseases. Those who pass this test then strip and are examined by physicians under the shop rules as to vision, height, weight, measurements, past injuries and sicknesses, and important tests or indications of disease. The exactness of medical science and health standards makes this examination conclusive.

HOW *primary tests in hiring can be used automatically to weed out the unfit, and largely determine the degree of ability.*

Physical and outward as this phase of employment is, it suggests the progressive view of the problem of finding and fitting in workmen. Men are coming to be considered to a certain extent as machines—infinately delicate and adaptable mechanisms, but mechanisms which can do their best only when assigned to the position whose various requirements, in general, parallel the subtle machinery of their brain, nervous system, and physique.

One employment expert, who has drawn standard specifications for judgment of men, first tests the applicant for his more obvious characteristics, his general appearance, his most apparent traits, his facial expression, manner of walking, method of standing or sitting, and attitude in shaking hands. By constant study, all these different points have come to have a standard significance to the expert, just as the red or white or blue card in the index means a definite thing to the file clerk.

The careful man, for example, will usually show his precision in his speech, in his walk, in his dress. His courtesy, his laziness or industry, his orderliness, his

optimism and his patience are tested by setting tasks for him, by catching him off his guard with irritating or novel topics of conversation. The shrewd employer is guided also by watching the hands of the applicant as he talks and by reading his true state of mind from the nervous or unconscious movements of whatever parts of his body he forgets to control. The problem is merely to interest the applicant, to get beyond his reserve, to catch him off guard, and then to read him, knowing precisely the qualities that elect or defeat him.

Physiognomy and physique often suggest a man's characteristics. Test questions make a man concentrate and forget himself, giving a glimpse of how his mind works. Expert study of the hand, on which is written the applicant's daily contact with his work and the ancestry of art or artisanship behind him, adds its clues to the character of the applicant.

Psychology is going even beyond these indications and contriving actual tests of results which men's minds and nervous systems give. In his laboratory the student of nervous reactions takes the problem of the telephone operator, the street-car motorman, the clerk, the machine operator; and contrives a simple apparatus which will reproduce the essentials of that task. He tests fifty average employees and establishes a standard of accuracy, of quick wits, of variation or originality. He tests fifty novices and fixes a standard of off-hand performance which probably eliminates the one in three or four who would be most expensive to train and least proficient in the end.

Every one of these methods which hundreds of different employers are working out piecemeal, is focusing on one ideal—a standard by which to grade the man for the job—a yardstick by which to determine the applicant

who most nearly fits a place of definite dimensions and requirements.

With the suggestion of these many different clues and bases of judgment before him, the employer of one or a dozen workers in store, office or factory, can set down his list of essential, standard qualifications for various positions. Thus to the saving of misfit effort and the accidents it brings in its train, you can help your applicant work out the absolute answer to the three vital questions of help hiring:

Is this man the best man for this place?

What can he do best?

What can he develop into?

THOSE who, in the golden age of art, painted or carved or wrote beautiful things, did so primarily for the love of art itself. So may I not assert that if in an age of industry a man devotes himself to industry for industry's sake, he is following the same artistic instinct of trying to do a fine act simply because it is fine? A business must be profitable if it is to continue to exist, but the glory of business is to make it so successful that you can do great things because they are great and because they ought to be done.

CHARLES M. SCHWAB,

Chairman of the Board of Directors, Bethlehem Steel Corporation

V

WHY WE ARE REPLACING MEN WITH WOMEN

An Interview with Will I. Ommer,
President, Recording and Computing Machines Company

WITH their deft fingers and willing minds, women workers are taking the positions formerly held by men in practically all parts of our factory. The women are proving specially effective on the lighter machines and on assembly work, where dexterity rather than strength is the necessary qualification.

One instance in our recent experience will indicate the quantity of work which women are turning out as compared with the former output of the men. For some time the men on our turret lathes who were turning out standard pieces had been able to average only 190 pieces a day. By time studies we decided it was possible for them to do about 375 pieces. We set this standard and the men were able to attain it. Not long after this, we found it advisable to employ girls to work on these turret lathes. They were first put through a thorough course of training and now are regularly turning out an average of 315 pieces daily on each lathe.

Of course, in order to obtain results of this sort, we have found it necessary to offer inducements. We are paying the women in our factory exactly the same rate of wages as the men. Many of them are getting from six to eight dollars a day. This, of course, is paid to them in the form of a standard wage plus a bonus. If

you could step into almost any of our departments, I am sure you would be impressed by the beehive industry of the place. In many cases the girls are actually so busy that they do not like to stop their work long enough to enter into any conversation even with their foremen.

Not long ago, the superintendent of the factory investigated the tools on one of our jobs where some of our most expert women operators were working busily. His investigation was of such a nature it required about one-half hour, and made it necessary for one of the expert girl operators to stop work. After waiting about ten minutes, she became very much excited and said: "See here, my dear man, I have to get out 500 pieces each day, and if I am interrupted like this, I can't do it. Please let me alone and let me get to work." This is perhaps characteristic of the attitude of all our women workers.

However, in spite of the amount of work they do, they are not overworked. In fact, they seem able to keep up their high rate of speed better than the men. In one of the assembly departments, for instance, we tried men upon a particularly trying job, and at the end of three days, they came to us and told us that the work was too strenuous. We put girls at the benches and there has not been any complaint.

We have rest rooms and a hospital where any of the women can go at any time during the day. We also have two rest periods, one in the morning and one in the afternoon, each ten minutes in length. I urge the women to rest during these periods and also to make as free use of the rest room and hospital facilities as they like. Recently I was walking through the plant and I noticed one of the girls leaning her head on the back of her chair. I asked her what the trouble was

and she said she had a slight headache. I told her to go to the hospital; but she refused. She was one in a group of workers who were doing assembly work and she felt that if she dropped out, she would make it impossible for the group to take care of the entire output planned for the day.

THE *girl workers are thoroughly trained in a "school" before they undertake actual work and are paid wages equal to those received by male employees.*

I am glad, however, when the girls do take advantage of the facilities we offer them. And when they do so, they can often cure at once their slight indisposition, whereas if they went on working when they were not in a condition to do so, they might overexert themselves.

In order to fit the girls for the various kinds of work which we expect them to do, we have a school with six women teachers. All new girls are required to attend this until they are able to perform the work on which we expect to place them. Usually this takes about three days. At the end of that time, they have had practice in exactly the kind of work that we expect them to do and they are not embarrassed or nervous when they are put out in the shop to do actual work. At one end of the room where we have the school, we have a big placard bearing these words "Girls, ask questions." Most of the girls follow this advice and it is surprising how quickly they learn the various phases of the work.

In addition to paying the girls on a bonus plan, the same as men,—by the way, I should mention the fact that we guarantee that the bonus once it is established will never be cut—we find it helpful to stimulate a friendly competition in order to get out the quantity of work which we think is proper as a regular schedule.

One of the methods which we find particularly effective, for instance, is what we call our barometer of production.

The barometer is merely a long sheet of cardboard, on which are drawn the outlines of six glass tubes such as are used in thermometers. Where there are four or five or six groups of women working together on a group bonus plan, we place one of these cardboard barometers in a position where all the workers can see it. Daily we draw in, in colors, the amount of work which each of the groups has done to date. If group A, for instance, has finished 18,000 pieces to date in the current month, whereas groups B and C have done only 14,000, it is obvious that groups B and C are anxious to bring their record up to correspond with A's. The girls do take a lot of interest in these barometers. They study them each day and there is a lot of competition between the groups.

Where the girls are working individually, we use blackboards to show who is producing the high record for the current day. Perhaps at three o'clock the girl at machine No. 47 has turned out 900 pieces, whereas most of the other girls have only done somewhere around 750. We put the high girl's record on the board where everybody can see it and this furnishes a direct incentive for the others to bring up their output as far as possible. Then in the office we have complete individual records of the output of every one of our eight thousand employees daily.

At this point it might be well for me to say that the quality of our work has in no way been permitted to go down as the quantity goes up. We have inspection at every step in production, so if an error is made in the first step, the product does not go through all the other

steps before the mistake is caught. Our experience has taught us that women workers seem to require different handling than the men. At first, we had a certain amount of difficulty with some of our foremen who were trained in handling men. They did not understand the women and tried to manage them in the same way that they had managed men. Gradually cases of this sort have been almost eliminated.

Our factory workers are, if I may say it, like a happy family. All the girls know me and I know a great many of them by name. I want them to feel at home with me. The greatest pleasure I have is going among them seeing they are happy at their work, and discussing any little problem with them that may come up.

Any worker has the privilege to come to my office with any problem she may have at any time of the day. They do come, quite a good many of them, but they are very fair about the privilege and they have never abused it. I make it a point when there is any question of discipline brought up, to have all of the persons concerned brought into my office at the same time. There we thresh the thing out from start to finish, find out who is right and who is wrong, and settle the matter once and for all.

I feel that it is my personal duty to help employees wherever I can. Not long ago I heard indirectly about one woman who was working for us. She had several children and her husband was paralyzed. I saw the best thing I could do for her was to give her a better class of work, which I did. I could name quite a few other cases of this sort or of a similar character. I like to do these things—besides having our loyal workers feel that they are working in an organization where the human element is not allowed to die out in favor of making the whole factory a mere machine.

All sorts of cases come up. Not long ago one of our men employees came to me to complain about the foreman in one of the departments where his wife happened to be working. The man was jealous. From his machine he could look across into the department where his wife was working. The nature of the foreman's work, which was inspection, required that he get close to the machines of the workers and the man imagined that his wife was flirting with the foreman. I brought all three into my office, had a plain talk with them and settled the matter then and there. In order to avoid any possibility of clash in the future, I transferred the woman to another department and her husband is now apparently quite satisfied.

W*AYS to keep girls interested in their work. How a style show for women workers, with gowns offered as prizes for excellent work, increased output.*

We have various methods of keeping up the interest of the employees. We have a large dining room which seats 1,500 people. We serve an excellent lunch at a flat rate of twenty cents a person. Often we move the tables and have informal dances in which many of the workers take part. Not long ago we had a style show which was of direct interest to most of the women. One of the large eastern merchandisers sent on some of his professional models and we selected a half dozen or so of the women from our own organization to serve also as models. The gowns were offered as prizes for excellent work. In this particular case, the effect was so direct and immediate that the output increased 100,000 pieces in two weeks. The girls showed themselves what they could do when they needed to, and since that time the production has never fallen below these records.

In our dining room we have an orchestra of fifty-two pieces which is made up among our employees and it plays every day during the noon hour. In addition to this dining room, we have a cafeteria where the employees may select any food they like and pay as much or as little as they wish for their lunch. In both the dining room and the cafeteria all the food is home cooked so that we can be sure of its wholesomeness. We serve the food at a little below cost and everything is kept perfectly clean and sanitary.

One other thing we are doing to keep the interest of our employees is to sell them certain articles at cost. Perhaps some manufacturers do not agree with us on the wisdom of this policy and we have had kicks from merchants against what we are doing, but I will cite some specific instances where we have saved our employees money by making quantity purchases and reselling the articles to our employees at cost. This practice has certainly made a hit with our employees because it enables them greatly to lessen the cost of living.

For instance, we recently bought a large number of sweaters at prices ranging from thirty-eight cents to eight dollars. Many of the girls and men wear these sweaters while they are at work and they appreciated the opportunity to buy them from us at the prices we paid for them. Among these sweaters were some which we sold at eight dollars of exactly the same quality that I had paid sixteen dollars for at one of the stores in Dayton. Again, not long ago we bought three carloads of potatoes and resold them to our employees at one dollar and sixty cents a bushel, whereas the retail price at most stores was over a dollar above that. We have a special brand of coffee made up for us which costs us nineteen and a half cents and which we sell to our

employees for twenty cents. The same grade of coffee can only be bought elsewhere at from thirty-eight to forty cents. Recently we bought a carload of grapes and had no difficulty whatever in disposing of the entire lot at a price considerably under the market.

RESULTS *some of the methods described in this chapter have accomplished both in improved morale and increased production.*

All of these methods have helped us materially to win the good will of our women workers. The women, we find, are absolutely loyal. They do not work for us a while and then quit, which is sometimes urged as one of the objections against woman workers. In fact, girls insist on staying with us. Not long ago one of the foremen was telling me about a girl whom he wanted to discharge. She told him that she couldn't quit, that she needed the position and was going to stay. I believe we found a way out of the difficulty and kept her. Again, the girls never show any desire to follow the hands of the clock and jump into their hats and coats at 5:25. They work until the last minute, eager to clean up the day's stint and make records.

Under our present conditions we are having no difficulty whatsoever in getting enough employees. As a matter of fact, we have been receiving applications at the rate of three thousand a week. We rented an office downtown some little time ago so the women would not have to come out to the shop to see us about employment. This office proved a failure, however, after a short time. The landlord had to turn us out because there were so many women coming to the office that the elevators couldn't take care of them. And we get a high grade of girls, too. For instance, we have working

for us now one hundred and forty women who gave up positions as school teachers to come to us. The wages are attractive enough to enable us to secure the best grade of women workers.

Of course, one important factor in getting the full quantity of work turned out is the organization of the work in such a way that it is "always coming." At our assembly tables, for instance, the work proceeds from one end to the other and no one can loaf or slow up without everybody else knowing it. The work immediately accumulates at the place where the worker is slowing up.

It is interesting, however, as indicative of the spirit in our organization, that when the work does slow up, the girls do not turn on the slow one and try to have her taken away from their group. On the contrary, they help her out as far as possible, try to show her how to do her work faster if she lacks the training, encourage her and help her if she is not feeling well, and in all ways try to realize that if they all help, she will probably be doing her full share in a short time.

At the first the men resented somewhat the employment of women workers. We still have quite a few men at various places in the factory and in a good many places they are doing the same work as the women. The first resentment quickly passed when the men saw that the women were outdoing them and they immediately found they must speed up themselves if they were going to keep up the pace. Men and women are working side by side in several departments and it is almost uniformly our experience that where the work is of a kind requiring deftness, a quick hand and a quick eye, and no waste motion, the girls are able to handle the work better than the men.

We feel that we have made a thorough test so far as our own work is concerned and the results are more than satisfactory. The work, too, is of a character requiring extremely close attention. A group of engineers some time ago told us that the total daily output we could expect from our plant would be around 4,500 pieces. Now, with the women workers, we are turning out from 37,000 to 40,000 pieces every day. With men workers alone, I am convinced we would not have been able to accomplish anything to compare.



LET your men know that you work harder than they do. If you expect to get any real work done—be there yourself. As a business grows, the head executive is entitled to more leeway, but in a little business the boss should always be around. When the business does grow and detail after detail is delegated, make sure that whoever takes over the duties which you performed, or any part of them, is also always about. You will never have the right team work unless each man is looking after all of his own job—and all the others know that he is.

JOHN NORTH WILLIAMS,
President of The Willys-Overland Company

PART II—HOW TO HOLD YOUR MEN

Putting Trust in Workers

A MAN will be happier in his work if he knows that he is a real part of the concern, if he knows that he can spend all his working days with you without danger of an overnight discharge. We believe that our men deserve something from us over and above the wages we pay them, and that something is our own personal affection and interest. In return we get loyalty and good work.

The whole thought of our establishment, and the reason that we gain such extraordinary loyalty, is that we work with our men and they work with us. There is no gulf between the shop and the counting room. We expect the men to come to us with their troubles, and they come as friends. We know them and they know us.

Are not some of the so-called efficiency methods in handling workmen merely an attempt to substitute rule for understanding—to get a human machine because the employer does not know how to get a fellow workman?

We put our chief trust in men; they know it—and make good.

A handwritten signature in cursive script, reading "Frank D. Lester". The signature is written in dark ink and is positioned below the main body of text.



FRANK DISSTON

President of Henry Disston & Sons, Incorporated

VI

THE KNACK OF HOLDING YOUR MEN

By Henry L. Willard,
President of the Brooklyn Traffic Club

MEN will not work for wages; for a certain sum per day they will go through movements, but, when only wages are concerned, men will not really work.

Men will work only for men. I care not what system of efficiency is employed or what mechanical refinements are used, the labor return will be inadequate so long as the personal equation is neglected. This abstract statement is nearly a truism, but few employers of labor concretely realize its truth, and too few of them put it into practice despite the fact that it might help them a great deal.

Some years ago, I was brought into contact with two trainmasters on an eastern railroad; they occupied the same office—each had the side of a big flat-top desk. One was then in charge of the passenger business and the other directed the freight traffic. I had a chance to observe their methods from day to day. The freight master knew every man under him by his first name; he knew something about every family, and he usually managed to get around to the house or hospital when one of his men was injured. The passenger master regarded his men as machines; he bellowed orders, he kept the office in endless confusion and he took par-

ticular pleasure in "calling down" men before the other employees.

The freight trains moved smoothly, the men were happy and interested—they would work overtime without complaint. The passenger trains were always late, the trainmen were always grumbling, and the way in which they referred to their boss could not be decently put into type. They were rude to each other and to passengers; they did the smallest amount of work they could do.

Today the freight master is the president of a great railroad because "he gets so much out of men"—he changed a two-million-dollar deficit into a surplus within a year. He can not now know all his employees, but he never misses a chance to know those with whom he comes into contact. The passenger-traffic master is a conductor on a suburban passenger train, waiting to be placed on the pension roll. The first man got results because he employed men; the second man failed because he considered his employees merely as units—inanimate parts.

I have studied the systems of many employers, ranging from individuals with but a helper or two up to the great corporations with their thousands, and I have yet to find an efficient, satisfied working force in which the fact that employees are men is neglected. I find that men do not work in the interest of their employer unless they are happy about their tasks. Such happiness springs from the bond uniting the employer and employee and this bond is founded upon personal relations.

It is lack of interest that makes the floater and the floater is responsible for the large labor turnover. I find that the most satisfactory way to manage employees and to keep them constantly happy, and therefore to get

a full dollar's worth out of them, is to: (1) maintain personal relations; (2) put all possible responsibility on the employee; (3) suggest rather than order; (4) advance by merit.

WHY *maintaining a friendly personal contact with employees is vital to every employer, no matter how large or how small his business may be.*

These four elements run through every successful employment relation that I have thus far discovered. The exact mechanism by which they are expressed depends largely upon the size of the business. But whether you have one or twenty thousand employees, it is these principles which keep the man on his job. Take the big corporations whose employees are noted for their loyalty—such as The Pennsylvania Railroad, The Standard Oil Company, The United States Steel Corporation, and you will discover that the employees have a personal bond with the corporation. So-called soulless corporations are merely poorly managed corporations.

I remember being with one of the minor superintendents of a very large concern when the president happened by. The main office of the concern was in another state, and to the best of the superintendent's knowledge the president had never seen him, and yet, as he passed through, the president stopped, said, "Hello, Mac," and shook hands with my friend.

The superintendent was vastly pleased and more complimented than he would have been by a formal resolution of praise from the Board of Directors. "How in the world did he know my name?" he marveled—at once he felt himself a real part of the organization. I found out later that this president, who is a very successful manager, keeps very close tab on the records of

every worker in his employ, and when he visits a branch he feels that he knows his men, even though he has never seen them.

It is easily possible for the employer of fifty or one hundred men to maintain the "big family" idea, to talk with his men occasionally in a friendly way, take interest in their families, and to remember them when they are sick. In the shops of a few generations ago the labor turnover was very small; employees were satisfied with their jobs because they felt that they were working *with* their employers. It is not merely the increase in the labor turnover which is reduced by the employee's interest in his work—his output is enlarged, and sometimes he will "get by" with extraordinary work at which the shirker will throw up his hands.

I recall a lathe operator in a very old shipbuilding company. He had "served his time" with the concern when it was a small affair; the founders and he had been on a first-name basis. In the course of years he came into charge of a very large lathe used for the heaviest work. When installed it was the best of its kind. Patterson, as I shall call him, grew up with that lathe—he almost became a part of it. In every modern system of efficiency the lathe should have been discarded, but, although new lathes came in, Patterson always kept the volume and accuracy of his output above that of the new ones. No other person in the plant could manage that lathe; fresh superintendents always reported that it should be scrapped; Patterson regularly challenged them to produce a better one. "When that lathe goes, I go," he always finished. Why or how he operated it will remain a mystery, but he kept his companion lathe until his death, and letting him have it was not merely a matter of humoring him—he delivered the goods.

This is hardly a typical instance, and one scarcely to be recommended as an example of shop management, but it goes to show what the employee's fellow feeling may mean to the employer.

As the number of men on the payroll increases, the head of the concern can not possibly know all his men; he can not spare the time to even attempt so to do. Division of authority is necessary. But each foreman and superintendent can carry out the same scheme of man control, if the stimulus comes from the top. The men below will reflect the attitude of the man at the top.

LACK of consideration toward employees may lead to serious loss. This fact was an influence in the failure of one railroad.

A large eastern railway was headed by a very efficient, but extremely pompous, individual; when he visited a subordinate, he stalked through the outer office wearing a high hat and looking neither to the right nor the left; he might have been in the midst of the desert of Sahara for all the people he seemed to see. What was the result? The same manner of treatment went all the way down the line. The vice-presidents bullied the superintendents, the superintendents bullied the managers, and, finally, the employees bullied the public. The railroad was nationally noted for its discourtesy; legislatures hampered it; and it was in a continual state of investigation.

The road became bankrupt—although it did not go into the hands of a receiver. A new president came in. In addition to railroad knowledge, he knew men; he never passed an employee without bowing; he never gave a peremptory order; when he entered an office he always

smiled and nodded to the clerks. Today that system is going forward. The public is treated decently and the turnover of labor, instead of being above fifty per cent, is below twenty.

The principle of subdivision of control which I advocate is founded on the personal magnetism of the man immediately in charge. The force directly under any one man should never be too large for the man to maintain personal relations. Some exceptional captains will manage a hundred men efficiently and others will manage only twenty-five. In general, I find that in the average organization fifty men is a safe limit to the force to place under any individual.

Closely connected with the personal relation, and one of the best methods of maintaining that relation, is the putting of all possible responsibility upon the individual. Make it impossible for the employee to say, concerning his own particular work, "That isn't up to me." Put it up to him. So systematize your work that each part of your working machine has a definite duty to perform. Each employee should do something entirely his own, be the boss of some little job or other.

The working out of the individual responsibilities is not an easy task, but it pays for the trouble.

Some years ago I took charge of a branch express company office which operated some thirty wagons, each with a driver and helper. Expressmen are rather above the average grade of carters, but they can hardly be classed as "high-brows." My predecessor had been a brawling, order-yelling sort of person who kept the office and the platforms in continual confusion. Patrons had been complaining of inattention and business had been falling off. When I took charge I called the men together and said to them, "Each wagon has its own

district, and I want the driver of that wagon to be responsible for all the business in that district; when you are driving about, drop in now and again on the people who ought to have express matter. Comb your whole district thoroughly; know everybody in it.

I made a point of knowing every man by his first name. In a short time they had my name—the rougher class of workers do not like to “mister” anyone. Perhaps my dignity suffered; but I got results. Those men swelled with pride in bossing their own jobs; when a shipment of express matter got away from them, they took it as a personal grievance. Our business increased a third during the first month. When I left I think we were getting everything possible out of the district. And I had very little work to do. I made suggestions from time to time, but I never gave an order.

ARBITRARILY overriding a subordinate's specific authority, or ignoring a man who should be consulted, may transform a good worker into a grumbler.

I did not discharge a man in two years. Most drivers will go on occasional sprees, but I never had the same man get drunk twice. When they did fall from grace and turned up expecting to be fired, I did not give them lectures upon the evils of drunkenness, nor draw a harrowing picture of their futures. I simply passed over the lapse. They knew that I was not fooled, and they so appreciated my intentional blindness that they would not again put me in a position where I might have to take official notice. They seemed to feel that it would not be acting quite squarely to make me discharge them.

This placing of responsibility upon the individual worker must be more than a mere form. It must be accompanied by a stern rule not to go over the em-

ployee's head in his own particular province of authority. The Pennsylvania Railroad never permits any official to go over a subordinate's head. That rule is the foundation stone of their magnificent system. Consult with your man if you think he is wrong, argue him around to your way of thinking—there is always the possibility that he is right and you are wrong. And the employee's interest and self-respect are preserved. Once ignoring the man who, in the usual routine, would be consulted, will often transform a good employee into a grumbler.

My theories are not at all original. They were first stated in the Golden Rule. I restate them because so many employers have confused effectiveness with what might be called non-humanity. Each human machine requires its own peculiar oil.



NOT only is the shop pay roll generally the largest single item of manufacturing cost, but it is an item which varies because human nature varies. Behind each precise total on the pay roll, is the story of the man's work on each job. And an analysis of the pay roll, consequently, is very often the interesting study of men's motives in doing work. Any manager who hasn't looked back of the total in each pay envelope not only has failed to make the most of his pay roll, but has missed an opportunity to get in closer touch with his workmen.

S. D. RIDER,

Vice-president, South Bend Watch Company

VII

HOW WE HOLD OUR MEN

By Frank Disston,
President, Henry Disston & Sons, Incorporated.

JACK was a grinder—an excellent workman—but a bit too fond of his pot of ale. Sometimes he held the ale as more interesting than the grindstone and then he “stopped out” for a day or two. By all the accepted laws of good shop management he should have been discharged, but Henry Disston, the founder of our business, discharged a man only when he could think of nothing else in the world to do. He never fired in the curt way that obtains in so many shops.

Jack began to “stop out” more than he worked. At last the Disston patience broke. Mr. Disston had the choice of letting the man go or of demoralizing the department, so he decided to discharge him.

“Jack,” he said—only first names are used about the plant—“this thing has gone on long enough. You’ll have to clear out; you’re discharged.”

Jack left. But on the next morning Mr. Disston, making a shop tour, found him again at his grindstone, working as though nothing had happened.

“Jack, didn’t I discharge you yesterday? What are you doing here?”

“Ah! Yes, you did,” came back Jack, “but if you don’t know when you have a good man, I know when I have a good boss.”

Jack stayed and he did not “stop out” again. I do

not know how many grindstones he wore out in the many years of steady work after that time. Certainly he must have been a heavy contributor to the wall of discarded stones that encloses the factory land.

I give this incident not as an example of how to treat men, nor as a clever retort by which a workman held his job, nor again, as a cheering thought to alcoholics; but as illustrating the spirit that has always existed in the relations between our heads and our employees. Jack was neither clever nor impudent; he was perfectly sincere in his idea that what he himself thought about his job was of equal importance with what his boss thought. He felt that he was working with the boss and not for him.

In many establishments Jack would have been only "No. 520, discharged under Rule So and So, for absence from duty," and that would have been the end of him. But Mr. Disston knew every man in the works and he had no rules. He did what he thought was right in each individual case. He felt Jack was worth another trial—and he was. Jack made good.

Henry Disston is dead, but his ideas of man management are the ideas which prevail here today. They have proved their worth in practice and we have never cared to change; we have no use for systems of hiring and firing; we want no tests based on this or that supposedly infallible physical or mental characteristic. In other words, we want a man, and not a machine; we think that unquestioned loyalty and an eager pride in the work are the most valuable qualities we can find in a man—and we get them.

We have 19 men who have served us continuously for fifty years or more, 90 who have served between



"Do we lose in point of individual efficiency by keeping men who are long past the supposed age of efficient effort? Fred J. Smith has been straightening saws for fifty years and the work he does is well up with that of the average of the younger men"



This man, Charles Davenport, is connected with a remarkable record. He is one of the original helpers of the founder of the Disston business and four generations of his family are now represented on the company's payroll

forty and fifty years, 238 who have been here for between thirty and forty years; 320 are in the class between twenty and thirty years; and 763 have been with us for more than ten and less than twenty years.

I doubt if this record can be matched by any other concern in the United States. But immediately one will ask, "Are you running a saw works or an old men's home? Does not common sense tell you to scrap men as well as machines?"

PROOF *that if a man knows he is a real part of the concern he is happier and, therefore, a more effective—and a more loyal—worker.*

Common sense is a matter of circumstances. We find that the best common sense is to keep a man on the job to which he is accustomed, as long as he does good work and chooses to stay there. If he wants to retire on a pension, we retire him; but if he wants another job about the place we find that job for him.

When Henry Disston was asked how he made such fine saws, he answered, "Good steel and honest work." The second portion of that phrase, which has become our factory motto, is quite as important as the first. You might have the best steel in the world, but after all you would not turn out good saws if you did not have men who were just as much interested as yourself in making a good saw.

A man will be happier in his work if he knows that he is a real part of the concern, if he knows that he can spend all his working days with you without danger of an overnight discharge. We believe that our men deserve something from us over and above the wages we pay them, and that something is our own personal affection and interest. In return we get loyalty and good

work. I think that it would be impossible for these men to turn out inferior work. Should we, in a fit of lunacy, order a lowering of standards, I imagine that most of the men would quit their jobs immediately. That is the reward we would get for not using common sense or business methods or applying rules alone instead of reason.

Do we lose in point of individual efficiency by keeping men who are long past the supposed age of efficient effort? Take cases.

Ben Taylor has been with us for sixty years. Up until three years ago he could do his work as a grinder as well as anyone. He refused to take a pension and we put him on the door. He is just as good a doorman as he was a grinder.

Fred J. Smith has been straightening saws for 55 years and in the amount and quality of the work he does he is well up with the average of the younger men. Jake Noll, with 52 years of service behind him, is still doing the delicate work of blade-hardening as quickly as the men of half his age who work with him. George Harris has kept up his end as a smither for 54 years. George Walker worked as a machinist for 50 years. Then his health began to fail and he asked to go on the pension list; he bought himself a farm and, in two years, had so recovered that he came back for his old job. He worked for another two years before he again went on pension.

Harry Piper, with 51 years of service behind him, operates a lathe as well as he ever did. Isaac King and William Riehl have been with us for 51 years, and Austin Carter for an even 50. All three of these men are as good as ever they were. It is the same story throughout the whole list of long-term employees.

The theory that a skilled mechanic is useless after he has passed the fifty-year mark is not based on fact. The older man cannot always move about so rapidly as the younger man, but where the work requires care and skill without much physical activity I would take the older in preference to the younger man. The arbitrary scrapping of men because of age is a sheer waste of economic effort. "Old age," we find, is a comparative term and is something more than years, and cannot be easily measured.

These men add stability to the establishment and avoid the constant supervision which an irresponsible working force requires. The boys they trained as apprentices are working side by side with them and absorb the traditions of the shop. They, too, catch the spirit that the most important thing is good work—that they are part and parcel of a big, human machine which is creating a product that must be kept at a certain established standard.

The attitude of the corporation toward the men is well expressed in an address by the late Hamilton Disston, the eldest son of Henry Disston, to the men, after the death of the founder:

"We are aware that while inventive talent may design and intelligence direct, it is in the skill, industry and honest labor of the workmen that success must be sought, and that by their exertion the world-wide reputation of the Keystone Works has been maintained; and upon their efforts, directed by intelligence and prudence on our part, depend future prosperity and success. It is not necessary that we should give you any assurance of our esteem for you as men, of our confidence in you as mechanics, or of our determination to follow in the same liberal and generous course hitherto pursued,

remembering the persevering effort, forgetting the occasional failure to succeed.

"As no honest workman ever appealed in vain to Henry Disston for sympathy or assistance, or failed to receive a just return for industry or skill, so we assure you that our intercourse with you will be guided by the same honorable principles. Relying upon our knowledge of the business, stimulated by past success and ambitious for the future, confiding in your skill and trusting to your pride in the works which you have assisted to establish, we are convinced that the well-earned character of our manufactures will be maintained and the range of their usefulness extended."

F*ROM the beginning of the Disston business, employees have been hired, trained, and helped personally, with the "big family" idea always in mind.*

That was the then head of the works speaking to the associates of his father. To understand that what he said was not mere words, it is necessary to understand something of the development of the Disston works.

Henry Disston started as an apprentice to the only saw-maker of the time in the United States; his employer failed in 1840, and Henry, taking some tools and steel in lieu of wages, started a saw works of his own in a Philadelphia cellar. He was the whole works and also the whole selling force; he had no capital and no credit. The jobbers were used to the English saws, and they would have nothing of the domestic make. He was confident he made a better saw than any other man and he almost forced people to buy them. The business grew, slowly at first, and then more rapidly. Always the idea was to make the best possible saw and this standard could be kept up only by men trained to care-

ful work. He trained all his workmen, and some of those men who worked at the same bench with the great mechanic are employed at the plant today, working just as faithfully as ever.

The boss and the workmen went through good and bad times together. When the plant burned down they all pitched in and built another. When the Civil War came on, Henry Disston told the men that he would give volunteers a bonus of half the army pay and hold their jobs open. A company was formed and went to war; the survivors came back to the shops. The force was a sort of family, and a family it has always remained. Its history repeated itself in 1915, when the same arrangement was carried out with the forty employees who answered the call of the militia and served on the border.

Henry Disston had five sons. Three of them went into the shops and worked on a par with the mechanics for seven or eight years, the fourth went into the accounting department, and the fifth studied outside before going into the management. Samuel Disston spent fifty-nine years in the shops, starting when only eleven years old. He served a full apprenticeship in many departments, becoming later a salesman and then for many years secretary and general manager. The corporation is a close one and almost every Disston who comes into an executive place first takes from five to nine years in the shops so that when he goes into the office he is not only a practical saw-maker, but he also knows the men as "Jack" and "Bill," and the men know him in the same intimate way. An identity of interest is established; there is no wondering what the new boss is like—the men have known him as one of the team. The only executive who is not a Disston is E. B.

Roberts, a vice-president, and he worked his way up in the office.

As the executive is a family affair, so is the personnel of the force. Henry Disston took on indentured apprentices; now indentures are done away with, but we hold to the apprentice system.

We take a boy of fifteen or sixteen, put him at ordinary tasks, and, if he proves bright and capable, start him as an apprentice when he reaches seventeen. He works at apprenticeship wages until his majority, and then he goes on the journeyman list. There is no rule about selecting the boys, except that a boy whose father or grandfather worked in the place is certain to be tried out; we want those to whom working in the Disston works is the natural thing to do; thus we have hundreds of fathers and sons and scores of grandsons. For instance, there are three generations of a number of families throughout the works.

The "big family" idea is carried into the home life. When the works was firmly established, and Henry Disston saw the need for room to enlarge, he bought several hundred acres on the Delaware River at Tacony. He reserved fifty acres for the expansion of the plant and divided the balance into building lots. He organized building and loan associations, helped out with second mortgages, and in every way encouraged individual effort toward home owning and home building. Today most of the employees own the homes in which they live. There is no welfare work, however; the men are too independent for that—they are given the means for doing their own welfare work.

The men have a mutual insurance or benefit association which is managed solely by themselves and a condition of membership is employment in the Disston



"Almost every Disston who comes into an executive place first takes from five or nine years in the shops so that when he goes into the office he knows the man as 'Jack' and 'Bill' "—S. Horace Disston (the man facing you) is shown at work in the Disston factory



"There is no welfare work . . . the men are too independent for that. On the recreation side is the Disston Athletic Association. The soccer team won the championship of the United States"



It is the belief in the Ford plant that men who spend out-of-shop hours in dirty, ill-ventilated homes are not able to do the best work. Accordingly, investigators are constantly suggesting improvements

works. They announced that they did not care to have a regular contribution from the company, and accordingly the company gives nothing except on the rare occasions when financial help is acutely needed. The company stands ready to help, but helps only in time of stress.

In the same way a man who, through illness or other misfortune, suddenly needs money can come unhesitatingly to the office and is personally loaned whatever funds he needs. It is a purely personal affair and he does not have to make a formal application or go through any humiliating red tape or investigations. He knows the officer with whom he is talking and the officer knows him—more than likely they have worked together and certainly they have often spoken with each other.

MEETING employees on a man-to-man basis gains extraordinary loyalty for the Disston company. Labor turnover in one year was less than five per cent.

On the recreation side is the Disston Athletic Association, with a fine playing field. The soccer team won the championship of the United States and the baseball nine took the industrial championship of Philadelphia recently. We find that the men are just as eager to have the name Disston ahead in athletics as they are to have it ahead in factory products.

The whole thought of our establishment, and the reason that we gain such extraordinary loyalty, is that we work with our men and they work with us. There is no gulf between the shop and the counting room. We expect the men to come to us with their troubles, and they come as friends. We know them and they know us.

We make the working conditions just as favorable as possible; we never drive, and we do not expect a man

to wear himself out. Most of the work is on a piece basis and when the day's quota is done the man may go home or work on, just as he chooses. The men know that the shop conditions are as nearly perfect as we can make them, because they see the future heads of the concern working side by side with them, not merely for a month or two, but for from five to ten years. They know that we do not ask them to do anything which we have not done ourselves nor which we are not willing to have our own children do.

In short, we try to keep away from the very idea of capital and labor and to get on the man-to-man basis. For instance, we have no fixed age at which an employee is entitled to retire on a pension, and neither have we a fixed pension. Generally the pension is half the wage which has been received in actual work, but sometimes we pay more than this amount. We put the age limit as a purely individual affair. If a man thinks he deserves a pension, we talk the matter over and if we agree, he gets the pension.

I think this personal relation is the ideal way of running a business, although I suppose it is old-fashioned. But old-fashioned or not, it produces results. Few of our men leave and nine out of every ten who leave come back again for their old jobs; the discharging of a skilled workman is so rare as to be an event. The whole labor turnover of an average recent year was only 34%, and yet this was high because extraordinary conditions lured away some of the unskilled and semi-skilled laborers. The turnover among the skilled men was less than 5%, and this is on a basis of 3,600 employees.

What does all this amount to in dollars and cents? We have a happy institution, but is it an efficient institution? You cannot have a permanently happy working

force unless the stockholders have a fair return upon their money—that is why so many humanely-managed concerns have failed to make ends meet.

Yes, working together pays. It has paid us through more than three-quarters of a century of steadily growing business. We have been able constantly to better quality; we have been able to install labor-saving machinery without opposition, for the men know that the machines are put in to aid them and not to take away their jobs. We have been able to lower production costs without sacrificing standards. We have made money.

Are not some of the so-called efficiency methods in handling workmen merely an attempt to substitute rule for understanding—to get a human machine because the employer does not know how to get a fellow workman?

We put our chief trust in men; they know it—and make good.



AS AN employer of over five thousand workers, I am naturally interested in knowing what they are thinking about. Indeed, it is an important part of my duties, as a business executive, to find out what their ideas and opinions are and, so far as I can, to embody them in the tasks at which they are engaged, and thus to make capital out of their originality and their suggestions. The fact that a large number of patent applications bear the names of my coworkers here in my factory is evidence of the value of the help that I have received.

THOMAS. A. EDISON,
President, Thomas. A. Edison, Inc.

VIII

THERE'S A SOLUTION FOR LABOR TROUBLES

An Interview with John D. Rockefeller, Jr.

By Samuel Crowther

MOST of the troubles between capital and labor, between the man of money and the man of muscle, between the larger employer and his employees—express the relation as you like—disappear when the man who pays and the man who earns realize that they are both human beings with interests and desires more or less the same.

“An absolutely square, frank talk in which the points of view are uncovered—in which each grasps the thought process of the other—permits a mutual understanding. And my observation and experience teach me that misunderstanding is at the bottom of every labor trouble. When both sides play fair, the differences soon solve themselves. Sometimes the employer forgets that the employee is human and sometimes the employee forgets that his employer is human.” Thus John D. Rockefeller, Jr., defines capital and labor in terms of everyday life. A very few minutes’ conversation will banish the notion that Mr. Rockefeller is merely the son of his father. He is thoroughly a personality—a personality of extraordinary magnetism; I can easily see why the miners out in Colorado like him. For he is frank, keen, entirely human, and without a trace of what the English call “side”.

"In the days when employment was largely a personal matter," continued Mr. Rockefeller, "labor troubles did not exist, for then the proprietor and the worker were always in touch with each other. But the modern large organizations tend to draw a line between capital on the one side and labor on the other and to stimulate the theory that if capital gets more, labor gets less. Hence there are those who hold that if labor's wages are increased or its working conditions improved, capital suffers; and again, on the other hand, men hold that labor is the producer of all wealth and is entitled to the entire product. Some of the men in Colorado were firm in the belief that all which capital now has was originally stolen from labor. And they acted accordingly.

THE employer and the employee are partners and there must be an equitable division of profits, Mr. Rockefeller feels. Personal contact is effective.

"But it is one of the noteworthy facts of industrial history that the most successful enterprises have been those which were so well organized that waste was eliminated; then the laborers were not only paid high wages but the public enjoyed declining prices and the owners realized large profits. Capital cannot exist without labor and labor cannot rise above a primitive state without capital. The two are necessary partners and, being partners, each must have a fair share of the profits. It is equally unreasonable to imagine that capital will exist solely to support labor or to imagine that labor will exist only to support capital. They must divide profits. What is a fair division? Probably no division can ever be absolutely just; and if one were just today, changed conditions might make it unjust tomorrow. But

certainly some satisfactory compromise can always be arrived at—unless selfishness and short-sightedness animate one or both of the parties.

“The absence of personal contact between the owners and the wage earners prevents compromises from being reached on the subject of wages and it also puts on the shoulders of the owners the numerous injustices and discriminations of the petty bosses. The foreman and the other men in subordinate authority generally rise from the ranks and they often become swollen with their new power; they discharge men without reason and they do many other acts which antagonize the workman.

“As regards the industrial disturbances in Colorado, their many distressing features gave me the deepest concern. I frankly confess that I felt there was something fundamentally wrong in a condition of affairs which made possible the loss of human lives, engendered hatred and bitterness, and brought suffering and privation upon hundreds of human beings. I determined, therefore, that in so far as it lay within my power I would seek some means of avoiding the possibility of similar conflicts arising elsewhere or in the same industry in the future.

“Following that strike, a plan was formulated by which future misunderstandings might be prevented. The mere settlement of a temporary difference is nothing—the parties must get upon a permanent basis of relationship.

“I felt that it would help me to gain a better idea of the laboring man’s position and also help him to gain a better idea of the employer’s position if I went out to the mines. I spent several weeks among the men at the camps and in the mines. I visited the men and their

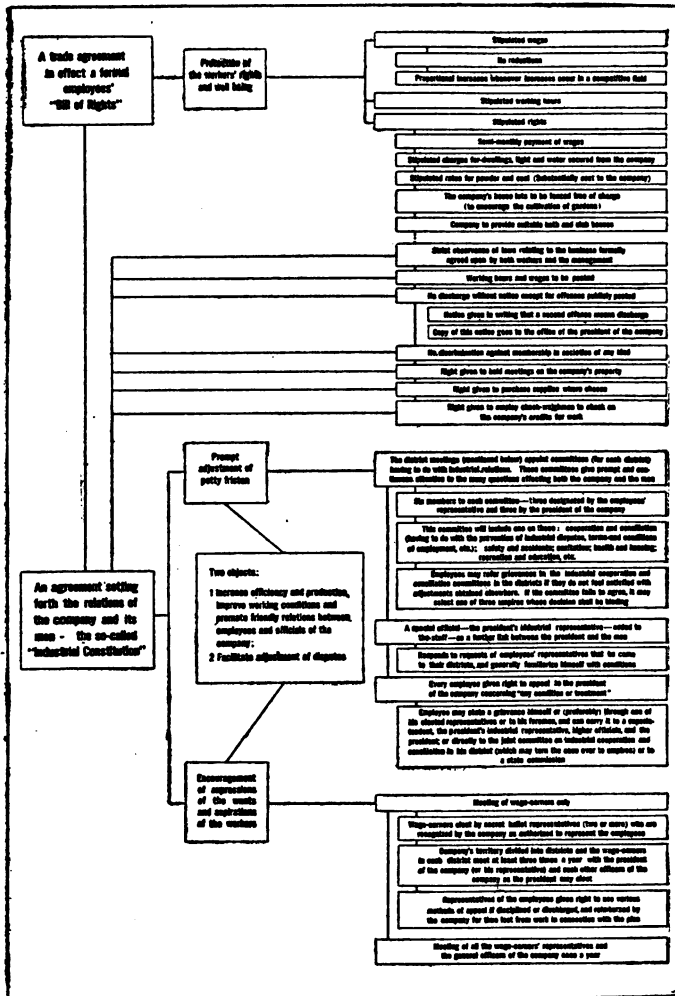


FIGURE 1: This is a graphic representation of the "Industrial Constitution" which Mr. Rockefeller and his associates used to accomplish the five objects listed Chapter VIII. During the time that it has been in operation it has proved entirely satisfactory

families; I went down into the mines—I went everywhere and tried to see everything.

“I came upon many men unexpectedly; to them I introduced myself; others were introduced to me. We talked over all our relations with the utmost frankness and I gained a very fair knowledge of their point of view. I found them uniformly open minded once they discovered that I really wanted their opinions; they were perfectly willing to come half way on any reasonable proposal submitted to them. For instance, I found that they imagined that Rockefellers had been drawing immense profits from their interests in Colorado; no end of people had told them so. I explained the exact situation to them. I showed them that, during the fourteen years in which we had been connected with the Colorado Fuel and Iron Company, it had never paid one cent in dividends upon the common stock.

“At one of our meetings I gave a practical illustration of the finances of the company. I put a number of coins on a table. I swept off a portion which represented their wages—for the first claim upon the company is the payroll. Then I took away more coins to represent the salaries of the officers and then the remaining coins to represent the fees of the directors. There were no coins left for the stockholders. And then I asked: ‘Men, is it fair, in this corporation where we are all partners, that three of the partners should get all the earnings, be they large or small—all of them—and the fourth nothing?’ After the illustration one of the men made a speech for higher wages. I asked him, ‘Is it square for you to want more wages when one of the partners gets nothing?’ He admitted that it did not look like a square deal; I heard no more about increasing the wages.

“The only trouble with those men was that they had

not known the facts; once they were sure that they were not being cheated, they were reasonable. They recognized that if labor insisted upon getting all, capital must withdraw. The men saw that the owners were only after a square deal all around. The machinery for securing this square deal is contained in an industrial constitution and a trade agreement which were submitted to a referendum of all the employees and adopted by a vote of 2,404 to 442. Both of these instruments are comprehensive and a copy of each is in the hands of every employee.

"The agreement covers the rent of dwellings, the rates for light and water, the prices of powder and domestic coal, the fencing of employee's homes, the removal of garbage, the providing of bath and club houses, the stipulation of an eight hour day for all employees working underground and in coke ovens; a nine hour day for outside labor, the semi-monthly payment of wages and an agreement not to change hours or wages without thirty days' notice and that there should be no increase in wages for any cause during the period of the agreement unless a general increase in wages should be made in a competitive district, in which case a proportional increase would be given.

"The basis of relationship, the methods for adjusting differences and for keeping both employer and employee happy are contained in the industrial constitution. This is a real constitution which establishes a real democracy between the owners and the workers of the company. It is the best way we have been able to find to bring all parties onto a common ground. The constitution stipulates that there shall be a strict observance by both the management and the men of the federal and the state laws respecting mining and labor and that the scale of

wages and the rules in regard to the working conditions shall be posted in a conspicuous place at or near every mine. No employee may be discharged without notice except for such offenses as are posted at each mine. For such offenses as are not posted, the offending employee must receive a warning in writing that a repetition of the offense will bring about his discharge.

“Among the fundamental rights guaranteed to the men is that there shall be no discrimination on account of membership or non-membership in any society, fraternity or union. They have the right to hold meetings on company property, and to make their purchases wherever they choose and to employ check weighmen. These portions are what might be called the ‘Bill of Rights’ of the constitution. The wage earners at each camp elect representatives annually on the basis of one representative for each one hundred and fifty wage earners with a minimum representation of two delegates. These men are recognized by the company as the authorized representatives of their constituents and they can treat with the officers as to terms of employment, on working and living conditions, and the general adjustment of differences. A meeting of all of the representatives with the general officers of the company must be held at least once a year to consider questions of general importance.

THE president of the company and representatives of the men meet periodically to adjust complaints and grievances before they reach the stage of discontent.

“The camps of the company are divided into districts and each district, through its camp representatives, meets at least three times a year with the president of the company to go over all matters of mutual interest

and concern. These district conferences appoint a number of committees on industrial relations of six members each, three members being appointed by the representatives and three by the president. The committee on industrial cooperation and conciliation consider all matters pertaining to the prevention and settlement of industrial disputes, terms and conditions of employment, maintenance of order and discipline, and the policy of the company. There are committees on safety and accidents, on sanitation, on health and housing and on recreation and education. In other words, the representatives of the company and the representatives of the men are formed into small committees covering small geographical areas, so that every local need or complaint may find a ready means for adjustment.

"In addition to and supplementing the representation portion of the plan, an officer known as the president's industrial representative is added to give an easy means for any employee to appeal directly to the president of the company. This officer goes at once to any camp on the request of the representatives, but he also, without request, makes as many visits as possible. Every day he turns in to the president a report of that day's work. Thus no man has an excuse to harbor a grievance; he always has the opportunity to directly reach the president.

"David Griffith has acted as the president's industrial representative with remarkable success. He has succeeded in settling almost every complaint because he has the confidence of all parties.

"The whole thought of the industrial plan is to make it impossible for any complaint—reasonable or unreasonable—to go unheard or fail to be disposed of promptly and fairly.

"Here are the numerous authorities to whom a complaint may be carried. Suppose a miner has a grievance. He may himself, or through one of the representatives, seek satisfaction from the foreman or mine superintendent. From them he may appeal to the president's representative, and from him, successively, to the division superintendent, assistant manager, manager, general manager, and president. Or, instead of appealing to individuals, the complainant may go from the foreman or mine superintendent to the committee on industrial cooperation in his district; if the committee itself does not agree, it may select one or three umpires to settle the dispute. And, finally, the employee may go to the Colorado State Industrial Commission. And the company must pay the expenses of any or all such appeals, including the worker's loss of time.

"The plan, during its operation, has worked exceedingly well. The right of complaint has been freely exercised and the decisions, by whomsoever given, have been received as satisfactory. The representatives as elected by the workers are a splendid lot of men working legitimately for the best interests of their constituents and not at all inclined to frivolous complaints. The plan has been criticised as being dependent on both sides acting squarely. Of course it is, but it also gives the best possible chance for all parties to act squarely and the least possible chance to act otherwise. And if anyone decides to be unfair—will any plan work?"



"THE greatest thought of this century is the transference of value from property to the human being.

PROFESSOR ROSCOE POUND,
Harvard University

IX

THE HIGH COST OF LABOR THAT COMES AND GOES

By Leon I. Thomas

Based on an Extensive Investigation

IT has cost this company half a million dollars because we located our factory out here two miles from town." True, the employment man who recently made this statement to one of the directors of his company had just been listening to dozens of workmen who, when they left this firm's employ, explained that it was "too far to come," "too hard to get to," "took too long to reach."

But he came to this conclusion from a large experience rather than from several months' daily contact with dissatisfied men. He realized that there is another side to the pure-air and lots-of-room-to-grow arguments for outlying plants. He is a close student of labor turnover and he knows of the far-reaching costs of hiring and firing.

Of all the reasons given for workmen leaving, complaint about plant location cited is somewhat unique and probably more prominent right now than it is in normal times when vacancies do not outnumber applicants. But there are other reasons for labor turnover which are evident at all times. Few managers waste any time arguing as to how sinister a factor labor turnover is. They well know its evils. Some attempts have been made to figure out how much it costs a firm

to break in a new man. Probably few have ever come very close to it. If more managers knew what this figure was in dollars and cents they would probably use their power of discharge with greater care.

At certain times when rival manufacturers almost come to blows in competing for men, the turnover problem is handled not so much from the discharging side as from the point of view of the development of ways to hold the men already employed and to establish a policy in the treatment of employees that will attract the best men and hold the old ones.

TAKING care in hiring help keeps down the high cost of labor turnover. Why men of the "floater" type are likely to continue their "floating."

One way that some factory executives go about the problem is to exercise care in hiring men in the first place. For instance, the employment manager at one automobile company finds that when there is a scarcity of labor about the only steps he can take is to assure himself by investigating references that only those men are hired who have stayed on three previous jobs a reasonable length of time. One Chicago concern keeps in an "excuse" book a record of the reasons men give for leaving. It does this not with the idea of having a record of the individuals who quit, but as a guide in the future to employing men. Of course, it also has its uses in eliminating features in the plant to which men object.

Labor turnover has been defined as the employing of too many poor workmen to get a standard organization of good men for a plant. The poor workmen are eliminated from an organization (1), by being discharged; (2), by being laid off; (3), by quitting voluntarily.

Aside from the fact that these inferior men ought not to have been hired in the first place, no manager cares much by which of these methods the poor workmen are eliminated, but unfortunately two of these general ways that men's names are dropped from the payroll apply to good employees as well as poor ones. Good workmen are laid off during dull seasons, although, of course, most managers aim to keep the best men, and capable employees quit of their own accord. Perhaps it should be said that all three of the methods of elimination of poor men apply to good men because sometimes skilled men have to be fired, but generally in this case proper management methods find a way for avoiding it.

Why are men discharged? While incompetence and insubordination would seem at first glance to be the leading reasons for discharge is it not true that most men are fired arbitrarily through the whim of a foreman? Perhaps it is because of religious or national prejudice or perhaps merely the outward effect of a grouch—but almost always unnecessary.

But what is the way out of it? Just as many a manufacturer has followed Ford methods of production others have profited by some of the management methods of this company, and one method has a particular bearing on labor turnover. The foremen do not have the authority to fire a man. They may effect his transfer to another department, but they cannot discharge him. Among some concerns there is the feeling that to take away the power of discharge from a foreman is to impair his initiative and decrease his hold on his men. Another point of attack, of course, is to raise the quality of foremen, to instill through personal contact and foremen's meetings more tact and other managerial qualities into these overseers of men.

Has the average concern a legitimate excuse in discharging a man because he is incompetent, assuming that he was hired only after due consideration in the first place. In this case wouldn't a little training added to what he does know about a job make him a worth while employee? Isn't it possible that a man who is incompetent in one job might be skilled in another?

It is a motto at the Ford plant that it is better and cheaper to fit than to fire. In fact, Dean Marquis of the Ford organization says that the best way they have found to hold down labor turnover is by shifting men again and again until they find the job for which they are fitted. As evidence that this company practices what it preaches, it has discharged only five men in ten months out of a force of forty thousand. Apprenticeship courses have been suggested along lines which bring out a man's aptitude for certain kinds of work and thus play a large part in the selection of men for jobs to which they are fitted. This may prove a growing factor in the reduction of labor turnover.

Insubordination as an excuse for discharging a man seems legitimate and in most cases probably is. But even here is it not true that insubordination is often the result of the manner in which an order is given or a request made? Isn't it worth while to develop a higher type of foreman with this in mind?

Sometimes men are fired because they "cannot get along" with other workmen. Much of this, too, may be the workman's fault, but the management has ample opportunity to minimize this defect by placing him among men congenial to himself or even by shifting him to another department where he is equally useful.

One phase of labor turnover comes under the sole responsibility of the management and that is when men

leave a company's employ because they are laid off. While this is often beyond the control of the executives of a business, managers are giving considerably more thought to it than formerly. They hesitate a little longer before dropping a number of men with the thought that they can easily hire another group next week or next month. They see the dollars and cents involved in such a thoughtless program.

Often it is hard to avoid laying off men, but too frequently poor scheduling of work or faulty ordering of material which does not reach the plant in time must be accepted as the real excuses. Dull seasons which cause peaks and hollows in the year's production curve are enemies to the efficient maintenance of a labor force. Such conditions were formerly taken for granted where now many concerns have adopted ways to smooth out the curve. Manufacturing for stock is a way out of the difficulty in some lines of business. Selling summer season goods in the tropics during the winter, amplifying the advertising appropriation during dull season and taking on a "fill-in" product are ways the problem has been attacked.

If some such methods as these had been adopted perhaps the following report from the New York State Factory Investigating Commission would not read as it does. "In 57 shirt factories in New York state, 10,150 persons were employed in the rush weeks as compared with 7,657 in the slack season—a variation of 30 per cent. The fluctuation in wages amounted to 46 per cent. In 45 firms in New York City and sixteen up-state firms manufacturing confectionery, the number of employees varied in one year from 9,700 during one month to 7,100 eight months later—an annual displacement of 27 per cent. The variations in wages paid were from \$79,000

in one week to \$52,600 another—a drop from high to low of 34 per cent.”

Where dull seasons are unavoidable, some concerns follow the policy of cutting down the hours of piece-workers and thus reduce the earnings but distributing the work in such a way as never to deprive the employees entirely of support. Only those employees who have been with a concern the longest or those who are the most skillful are likely to complain of such an arrangement.

HERE are ten basic reasons why men quit jobs—
most of these causes can be remedied by sound management and proper supervision of employment conditions.

Perhaps the most frequent cause of large labor turnover, particularly in prosperous times, is the voluntary quitting of employees. And why do men quit of their own accord? Probably most of the reasons are included in this list: because of low wages, of long hours, of inequalities in pay, of fancied wrongs, of poor working conditions, of dislike for a particular kind of work, of inability to get along with fellow workers, of poor location of plants, of inability to see a future, of wanderlust. And most of these causes find a remedy in sound, up-to-date management.

Perhaps the first reason, low wages, is least amenable to management methods, for in the long run wages are determined by the labor market and find an upper limit dictated by competition made evident through sales prices. Some factory men, however, believe that under proper management conditions the raising of wages may be followed by the cutting of costs. They feel that this may come about not only through production, but because of the elimination of labor troubles, the securing

of the most skilled help in a given locality. This is in effect, of course, the plan followed by the Ford Company in its now famous five-dollar-a-day minimum.

Long hours may well be a reason for a large labor turnover which is a detriment far out of proportion to the inefficient output of the hour or two excess over the customary working day. A low scale of wages, many firms have learned, may not discourage so many men as inequalities in its distribution among the workers. Quoting from Boyd Fisher, Vice-president of the Detroit Executives' Club, "this constitutes the worst injustice of all." He cites one employment manager who discovered a workman who had been on the same rate of pay for five years. "He is now seeing to it that men in his company are periodically advanced or promoted in accordance with their efficiency records regardless of whether they ask for increases in basic rates or not." Some managers attempt to overcome the unjust distribution of wages by paying for men's output and this, of course, has led to all sorts of wage-payment plans from the simple piecework to some of the highly complicated bonus forms of payment.

Because a wrong is only fancied instead of being real does not help the employment man or the turnover record any. If a man thinks he is not being treated right and jobs are plentiful he leaves; whether there is any basis, in fact, for it is outside the question. Is it not probable that a better man-to-man supervision is one way to clear up these fancied wrongs? Perhaps authority of straw bosses should be reduced, perhaps a closer contact with the men higher up, perhaps an insight into the aims and policies behind a business will straighten out some of these psychological reasons for a man's quitting.

As an instance of the plan of letting workmen know the policies of a concern, the things for which it stands; in other words, what it is all about, might be cited that of the Packard Piano Company. Mr. Bond, the president of the company, has but to open the middle drawer of his desk to show you the written policy of his concern subscribed to by each of the men in the plant. They know what they as units and as an organization are aiming at and they know the management point of view toward them.

IF THE worker feels his employer has a sincere interest in him he is a better worker. How welfare work of almost every nature helps strengthen this feeling.

In some plants it is felt that definite evidences of team work between management and men are helpful in smoothing out petty wrinkles in handling labor. For instance, one Massachusetts concern, where a large number of Swedish people are employed, recently held a folk fest. The general manager of the concern headed the procession at this event and the board of directors were all there. Later there was a ball game, then a parade in which the executives figured prominently. This show of interest was not merely staged, but sincere and it had its effect. One specific result mentioned by the employment manager of this company was that shortly after the folk fest four times as many people applied for jobs as did in the few days before the event and after the ball game six times as many wanted jobs as before either of these events took place.

Manufacturing standards in general are such that unhealthful working conditions in plants are fast disappearing and where prevailing standards offer no spur, competitive conditions do, so that only those factories

operated from the safety and health standpoint secure the pick of labor.

According to W. A. Grieves, Supervisor of Employment and Welfare Work in the Nash Motors (Jeffrey Manufacturing) Company, mutual aid, hospital work, restaurant, cooperative store, bakery, dairy, building and loan association, are all factors in the permanency of the labor force in that company. No workman need feel that he may be jeopardizing his health by working with a fellow employee who has a contagious disease in a plant where physical inspection is part of the employment and labor maintenance program.

Fewer men would leave a plant and give at the next one the excuse, "I didn't like the work," if the first one had in its organization what might be called a clearing house for labor between departments. At least, many concerns like the Ford Motor Company find that it pays to shift men from job to job until they find one to which, by skill and preference, they are best suited. Then, perhaps a man liked his work originally but has been kept on the same thing too long. Was the man far wrong who said that the difference between a rut and the grave is only a question of dimensions?

There is also the man who quits because he cannot get along with his fellow workers. Isn't there a management remedy that fits this man's case? Can he be placed in another department among fellow employees with whom his nationality or sentiments do not clash? Here again, the tact and skill of a high type of foreman pay dividends.

The effect of plant location on employment conditions was commented on at the very first of the chapter. As was said then, this as a factor may be larger in abnormal than in normal times. But always living conditions

have a bearing on the subject and if satisfactory living quarters can be found only at the expense of a ten-cent fare or an hour's ride it may be reflected in the labor turnover figures.

Some wise managers have foreseen the monopolizing by real estate concerns of desirable property for homes and have cooperative plans which make it easier for employees to buy their homes or to rent them at a reasonable figure. Where men buy homes, there is opportunity for holding down ill-considered resignations.

One Iowa concern lays a great emphasis on the men owning their own homes. One of the questions asked of every applicant is whether he is in position to pay something on a home. If not, he is asked if he will start saving for one as soon as he is able. The man's expression in this regard is taken into consideration in accepting him. Just as monopoly on real estate may be offset by a company-controlled building and loan plan so cooperative stores may become a factor in holding your men.

Every manufacturer seriously considers the question of waste, but there is one waste going on in many organizations that is entirely overlooked, and that is the waste of ambitious men. Many factory employees are entirely blind to their own future in an organization, not that they want to be, but the management has never taken upon itself the initiative of describing what's ahead for them. One company has a definite policy of telling each man what's ahead of him. This policy comes about as a result of the personal point of view of the head of the organization. In another concern the rise of each executive in the organization is pictured to the men in an endeavor to show the possibilities ahead of each one of them. In a Massachusetts factory the employment man-

ager makes this a part of his program in employing new men, telling them frankly what they can expect. This has the effect not only of spurring men on, but also the statement is made so conservative that men are not hired under false pretenses and therefore doomed to disappointment later.

The intangible wanderlust, particularly in the younger men, is a larger factor than ever in labor turnover when jobs are plentiful. Sometimes a man's craving for a change may be satisfied by shifting him to another department. One concern with factories in different parts of the country holds those of its men who have the roving spirit by transferring them from one plant to another upon request, wherever possible.

But in most plants it is a combination of policies and plans that serve to hold men threatened with the wanderlust, rather than any one plan. Home-owning and building plans may be a factor in holding the older men, but have little appeal to the young employee. The development of a shop spirit akin to a wholesome college spirit is often a factor in holding young men. Pensions, profit sharing, bonuses and opportunities to buy the company's stock also have an influence in holding men who are tempted to go elsewhere merely to get a change. Of course, no matter what plan you adopt, it should normally be one which will work out for the greatest good of the majority of your employees. In every organization, no matter how large or how small, there will usually be found some workers, who, however unthinkingly or unknowingly, seem selected by a perverse fate to act as stumbling blocks to the unqualified success of any plan. Happily, however, this class comprises but a small minority and the employer who devises a plan which holds and satisfies a majority of his workers,

usually has good reason to call that plan a success.

Types of employees differ as do the characters of factory organizations. Plans that work well in one plant may have no success in another where conditions are different. But out of the range of plans outlined here are there not some that fit your particular case? Failure to adopt some means of combating labor turnover is going to continue to emphasize "The High Cost of Labor That Comes and Goes."



WHATEVER success I have made during my career as a manufacturer I attribute to my close application to details and to my careful selection of competent men. Also it has been due to a large extent to my determination always to build an article upon honor and to give the greatest value possible for a dollar. This I have tried to accomplish not by asking workmen to work for less than a reasonable pay, but by economizing in other directions—chiefly on nonproductive labor and overhead expense."

C. W. Nash,
President, Nash Motors Company

X

KEEPING IN TOUCH WITH JOHN AND JIM

The Views of 63 Executives, with an Introduction by William Cordes,
General Manager of the Florence Manufacturing Company

A STRETCH of low meadow not yet very extensively built upon, separates Florence, a suburb of Northampton, Massachusetts, from the city itself. Florence has a "center" of its own, churches, a public hall, a library and so on. Three large industries—one a tooth brush plant—and a few smaller ones have always kept everybody in the growing community employed and make it an economic unit. The population is therefore old-established and well mixed, a closely knit social unit.

Everybody rubs elbows with everybody else, attends the same churches, has graduated from the single grammar school. Probably in no manufacturing town does the industrial citizenry excel that of Florence. Intelligence, character, and the social instinct have but to be let loose in such surroundings to produce a compelling social force.

"Yet we were not getting in the factory the benefit of all that social force," says William Cordes, Treasurer and General Manager of the Florence Manufacturing Company, the tooth brush factory of the town. "Our lately deceased former manager was a fine man. He had a big heart and would do anything for his employees in a crisis. Yet he lacked the ability to express his depth

of heart in little, simple, constant, everyday ways. He called us together one day fifteen years ago, those of us who were nearest to him, over in the old office. 'Boys,' he said, 'we need some young blood. This institution is in danger of dying from dry rot.' The particular breed of young blood he had in mind was that which could coordinate the energy and spirit of every one in the factory. He was a natural born gentleman. But he was modern. In today's language, his idea was that a good factory is a self-starter; that vim in the body of the machine is worth a lot more than vim in the crank-handle; that the chauffeur's business was rather to see that all the members of the organization work intelligently together than to pull the whole organization himself or kick it along.

"I think that even a piston would like to know why it is moving. Certainly any man, whether manager or foreman or machine operative, would rather work intelligently than in the dark. He works more easily, gets more positive results, with less subtracted for waste, plus an occasional inspiration. Also, brains are like sources of water power; they may be there, but in general they don't come out and do work unless they and the personality behind them are recognized. It is easy to explain methods and ends to department heads or to foremen. But even if you had the time, it is impossible to explain purposes and methods to the entire rank and file—neither a bookkeeper nor a machinist can gain each other's or your viewpoint in a minute. The only thing which can take the place of complete detailed knowledge of whys and wherefores throughout the factory is a general knowledge of the personality of the company's executives, a sort of faith in them, which can only be gained by personal intercourse.

'We were urged to show whatever social spirit was in us. The Commodore, as we loved to call the manager, promised that he would do his best to follow our example. He did so, and eventually won a great deal of the social ability—which is what it really amounts to—the lack of which he had formerly deplored. The new spirit soon spread to the foremen, and expressed in a secondary form by them, reinforced our own activities also. Things went along more comfortably and better. Since then every improvement has been in the direction of more personality in the factory. We have not by any means 'died of dry rot.'

PERSONAL *contact between employer and workers makes for an excellent esprit de corps, and this in turn leads to more and better production.*

"The matter of obtaining a closer personal contact is resolved into three questions. First, how far a manager should unite his personality with the business. But that is easily solved, because a manager is the personal expression of the business or corporation. He cannot dodge being so, neither can the company, and both should get the benefit, as well as the responsibility, of his representation.

"Second, there is a fear that certain psychological reactions detrimental to the work would result from too close relations between employer and employee. But if a manager choose to be very reserved, he will have to take the inevitable results. An employee will shrink from giving any extra interest to his work, because he thinks that in an exchange of sentiment he would be flim-flammed by an employer who has no reciprocal interest in him. You have heard this: 'Why should I do anything for him—what does he care for me?' Or,

'What does the company care for me?' This attitude of mind becomes a habit and is apt at any critical moment to cause loss which cannot be measured in dollars but is an index of a constant indefinite loss. On the other hand, I found a foreman a few days ago laying out, months in advance, a design for a next year's style.

"As soon as it is found that the main result of expressed good will is of benefit, a way will be found to control the by-products. These reactions naturally depend upon the characters of both employer and employees. But these characters are not ossified, or even static; they are dynamic, and will be themselves molded and changed during interaction so as to work more easily toward the desired results.

"Third, the limitations and limits of the application of this policy. At this factory our relations within the circle of foremen are very close. I know a great deal about some of my foremen's business and private affairs, such as sickness, deaths and personal home life. There are no limits to the spirit and practice of social good-feeling except those of sincerity on the one's part and comprehension on the other's. I would not force the extension of personal relations to anyone who is unwilling or distrustful. We had demonstrated to us in our own plant the advisability, almost necessity, and subsequently the benefit, of a greater personal contact with the men.

"We have had to import a great deal of help from outside of town, due to a sudden unrest, probably caught from the munitions industries nearby, which happened to come just before a large expansion of our plant. The increase to 450 workers therefore amounts, from a personal contact viewpoint, to an increase much larger, and faces us with the problems of a bigger plant.

It is somewhat like starting all over again. Now some of these men are 'floaters,' who have worked in all sorts of places under all sorts of men. It is a point of pride or instinct with many of them never to take a man or a word at face value. The best thing to do with them is to leave them severely alone. Some of them will go away, because they are built to go. Those who will stay are fast being silently taught by the *esprit de corps* of the factory, the spirit of good fellowship which makes for a united energy in getting out the best and most product."

What Mr. Cordes has written concerns his management views in general and specifically how they work out at the Florence Manufacturing Company located amidst perhaps an average small-town environment. How near these views check with average management opinions on the human factor may be seen from a review of the answers factory executives gave to a list of questions sent them. The questionnaire form which was sent out is reproduced on page 109. It may be interesting to take up the questions asked, one by one, and see just how these 63 factory managers have answered them.

In the first place there is the main question, "Do you see value in retaining a personal contact with your employees?" Is it not a significant fact and a credit to modern management that only one executive out of the 63 who answered had a negative reply? It is only fair to say that many of the sets of questions sent out were not returned and very likely some of these fell into the hands of executives who see no value in the development of a closer personal contact between manager and men. Because of a feeling that all the rest of the questions hinged upon an affirmative answer to this first one, some of these executives may have withheld their negative

answers. On the other hand it is likely that many of those who did not reply were prevented from doing so for other reasons and would have answered "yes." "Decidedly" is the answer two men give, and one adds, "The big problem today in large organizations." "Yes," the superintendent of a shoe supply factory says, "If an employee believes he is working for a man and not for a soulless corporation he does better work other things being equal."

LIKE many other methods personal contact may be overdone. Consider it from a business standpoint, and don't let employees mistake it for preference.

Some of the affirmatives were qualified. "Yes, to a certain extent," one reply reads. Another says, "Yes, but care must be taken not to obtain a wrong impression." To the second question, "Do you see a danger of overdoing this. If so, in what way?" some interesting answers came. Of the 57 who answered the first part of this question 43 saw a danger of overdoing the development of a closer personal contact with the workmen, while fourteen saw no reason for the exercise of restraint. Of these fourteen one pottery company executive does "not believe this will be overdone by a prudent manager." A Connecticut manager says, "Not if a reasonable amount of dignity is maintained," and two others contribute practically the same thought in exactly the same words, "Not if good judgment is used." "Not if you are simply friendly and not too intimate," "No danger if common sense is used," add two more thoughts to the discussion.

The production manager of an Illinois company balances the question well in this answer, "Not as long as this contact smacks of business only, that is, of the wel-

Retaining Personal Contact With Your Employees

1. Do you see value in retaining a personal contact with your employees? Yes
2. Do you see a danger of overdoing this? If so, in what way? Yes - Sometimes harder to discipline employees
3. If your organization is too large for you to know each man personally, what methods have you for keeping in personal touch with the men through your subordinates? Not too large
4. If you make a practice of going over your plant or store regularly, when and how often do you do it? Three times a week - Inspect the work being done at machines. Sometimes merely by a glance
5. Do you feel that there is advantage in this procedure from a personal contact viewpoint? Yes - gives employee feeling that he is more than a wheel
6. Do you include among the reports that you insist on receiving notices of promotions of everyone in the organization? Yes - Even increases in wages of a few cents per hr.
7. Do you make it a point to have a word to say to the men promoted? Sometimes
8. Do you agree that there is value in a sincere word of this sort? Yes
9. Some managers wish to be informed of sickness, deaths, new arrivals, and other important events in the lives of employees so that they can take proper notice of it. What limitations do you see to this plan? None
10. How far up in an organization do you think the plan mentioned in the previous question can be carried and not smack of insincerity? As far as sincerity extends
11. Do you see value in the policy of the chief executive who has "walk-in" printed on his office door for all who read it down to the porter? Yes - My door is almost always open
12. What objections do you see to such a plan?
13. One employer not long ago gave a dinner to the employees who had been with him for forty years. What similar plans have you carried out to make your men feel that you are all in one large family? Weekly meeting of foremen
14. Do you believe athletic association events, picnics, and so on have a value from the personal relationship viewpoint? What is your experience?

IF YOU PREFER, DISREGARD THESE QUESTIONS AND DICTATE A LETTER IN REPLY

Name T.T. Logie Title Gen'l Mgr. Firm Chapman Mfg. Co.
180 Devonshire
Boston, Mass.

FORM I: Here is the question sheet filled out by the 63 executives on whose answers this chapter is based. In some cases the executives were so interested in making their views known that they took time to dictate letters supplementary to the questionnaire

fare of the individual from strictly a business standpoint, otherwise I would say that it may become very detrimental."

Of those who feel that there is danger in overdoing this phase of management it may be interesting to analyze the reasons given. Eighteen believe that over-familiarity is to be guarded against. Eight think that workmen will take undue advantage and an equal number believe that a loss of respect for superiors may result. Five are of the opinion that favoritism is apt to be shown. Two think that although such plans are good they will over-emphasize the value of individuals.

Fear of over-familiarity seems to be much the largest warning to heed according to this ballot. This is expressed in a number of different ways, some of which are so indicative of the thought put on the question that it may be worth while to set down a few of them here. "By getting too personal. Works both ways." "Employees may try to become too familiar, and begin to feel that 'getting on the right side of the boss' is more advantageous than doing effective work." "Personal contact can be overdone by getting 'chummy' and lax." "Lack of appreciation or misunderstanding the motive." "Most workmen can't have too much familiarity with the firm and still keep their places." "The contact must not be too intimate. Talk of work only." "Too much familiarity is apt to cause jealousy." "Familiarity breeds contempt." "Too much familiarity causes slackening of discipline when a rush comes." A thought along similar lines is that of Stephen B. Mambert, Vice President and Financial Executive of Thomas A. Edison, Inc., who writes, "Yes, extreme care must be exercised not to carry personal contact to the point

where it causes some individuals to feel that they are in a preferred class."

"Too much attention cannot be paid to the subject of personal contact with employees," is the opinion of George A. Sagendorph, general manager of the Penn Metal Company. "Of course," he says, "it may be overdone, and you will find at times people who will take undue advantage of your good intentions, but the ultimate value of work along this line can readily be seen by anyone who has followed it intelligently for even a short space of time."

This really sums up the opinion of practically all. It is only cases of individual workmen that managers have in mind when they speak of the danger of overdoing the cultivation of a closer personal contact with employees. This is evidenced by the fact already mentioned that all but one who sent answers see value in close relations. Several feel that lack of respect for superiors will follow unless properly handled but, as an executive prominent in the Packard Motor Car Company says, "This can be avoided by tact on the part of the head of a business. Naturally in order to obtain discipline, the minor officials who have direct charge of the work, must have the respect of the men. If the men felt that they could go over the heads of minor officials there would be danger."

Another angle on the same thing is brought out by L. J. Vorhees, works manager of the Providence Manufacturing and Tool Company. He says, "When an employer carries this to such an extent that it becomes distasteful to the employee or lowers his standards in attempting to meet the employee on his level to such an extent the employee loses respect for the employer." Care to avoid favoritism and the consequent growth of

jealousy among the men apparently is also necessary in good management.

Two of these 63 factory executives who favor close personal contact with employees feel that unless handled wisely it will give the men a sense of over-importance, encourage the magnifying of trifles, and add to the burden of executive duty.

The third question asked was the following, "If your organization is too large for you to know each man personally what methods have you for keeping in personal touch with the men through your subordinates?" Of those whose organizations were of sufficient size to come under this question 55 per cent reported that they accomplished results through assistants. Another group felt that they had succeeded in retaining a personal contact through foremen's meetings. A third and smaller group were of the impression that a close perusal of well-kept employees' records was a good method to follow.

W*HY the department managers and foremen should be trained to act as mediums through which the executive head can keep in close touch with his men.*

When an organization grows beyond the stage where the head of the business can know the individual workmen the answers seem to indicate that the foreman is generally relied upon to retain the desired personal contact with the men. Whether or not this is successful is open to question. Dean Marquis of the Ford Motor Company has said, and many agree with him, that it is comparatively simple to get management policies to filter down an organization to the foremen. But here they are quite likely to stop. If this is true in a general way isn't it doubtful whether the desired sort of personal contact is being obtained by way of the foremen?

One interesting reply from a large silver manufacturing concern contained this, "Our employment man spends all his time when not actually interviewing applicants, in going round the factory and finding out how men recently hired are getting along with their work." This procedure must have the effect of making a new man feel that he has a very definite relationship with the management.

Harry Franklin Porter, organization engineer, Detroit Executives Club, contributes these suggestions that are worth thinking over, "Keep efficiency records of each man. Train immediate supervisors to take a personal interest. Have a department to which the men may go freely." Also of interest is the following statement of the superintendent of a large knitting mill, "When our factories outgrew the 'small factory idea' I started to surround myself with the brainy department heads. I keep in touch through them." One New Jersey executive says, "I invariably make it a point to inquire about new men and make their acquaintance by direct approach." "Acquaintance is automatically made through applications for wage increase and changes of work," one Connecticut manager adds. From Thomas A. Edison, Inc., comes this interesting answer, "By a combination of staff and line organization—the line organization keeps up the personal touch."

Practically every manager who answered has a policy of going over the plant fairly regularly. Many seem to have the opinion of one production engineer who says, "It is a good plan to do this and to talk with individuals, thus getting their viewpoint. Often troubles will come to your attention that you never knew existed and which you could never discover any other way."

By far the greater number make this trip as often as once a day; in fact, four-fifths of those who answered question four go that frequently. One said he made a trip as often as once an hour at certain times. In making these trips there seems to be a desire to go by different routes or at a different time of day so as to preclude any possibility of the men anticipating a visit. "Unless you do this," one man says, "you won't see the general run of things."

Only two managers fail to see a value from the personal contact viewpoint in such trips about a plant. In fact, such phrases as the following were used in answering question five, "Decidedly, the men feel the management is taking a personal interest in their work." "I know there is." "Has a decided advantage." "Yes, makes men feel their individuality is not lost in the multitude." "Absolutely yes." "Decidedly so." "Most assuredly." "A very large one." "Yes, from the example set."

An interesting thought is added by the works manager of a Rhode Island concern who says that he makes the trips often enough so that the men will be sufficiently accustomed to seeing him in the factory so that they will not change their habits or methods of work when he passes them. Another executive adds, "It is decidedly advantageous for the men to know the head of the business by sight at least." Still another feels that he keeps in better touch with the foremen through these trips.

The sixth question read, "Do you include among the reports that you insist on receiving notices of promotions of everyone in the organization?" Results on this question show that much the greater number do make it a point to know about all promotions. One manager

who sends out notices personally of all promotions in the plant adds, "but I always make mention in notifying the men of promotions that they are at the recommendation of the foreman."

Still another factory executive writes in answer to this question, "I certainly do. This method serves to keep you in close touch with your organization and is an important part of the system." "Yes, even increases in wages of a few cents per hour," is the way one Massachusetts general manager answers. "Certainly" and "always" seem to be characteristic replies to this question, indicating the importance of handling promotions in this way where the size of the organization will permit. But, of course there are cases where this is not possible, such as is indicated by the following: "As our plant employs 12,000 men, I cannot personally talk to all the men promoted, but I do talk to all men promoted above the position of sub-foreman. A proper talk to a man at the time he is promoted by the executive head of the business is of the greatest importance. There are more men who would like to do what is to the best interest of the company than there are companies who keep them so informed."

EXTENDING *the sphere of the employer's interest in his men into their home life, even aiding in sickness or financial trouble, is favored by many employers.*

Question number eight naturally received about the same answer as did seven. One was a matter of practice and the other belief in the value of the practice. "Some managers wish to be informed of sickness, death, new arrivals and other important events in the lives of employees so that they can take proper notice of them. What limitation do you see to this plan?" This

is the way the ninth question read. About half of those who answered were in sympathy with the plan and a number of others thought it a good idea but too much of a time consumer or difficult of attainment in a large plant. A half dozen thought it smacked of paternalism, but only one distinctly did not believe in it.

The vice president in charge of manufacturing in one large company says, "If it were possible, I believe that in the case of sickness, death or financial trouble a representative of the firm should call upon the employee at his home and assist him in any way possible. There is nothing in my judgment that would be of greater stimulus to loyalty than sincere help and thoughtfulness in any time of adversity." It is suggested by one answer that the company house organ or factory paper should take note in its news columns of all matters of this sort.

An important point from the utilitarian angle is brought out in this answer: "This is of vital importance, especially the report of sickness and absence. I believe that each absence should be investigated. For my personal experience in these investigations which I always make have discovered many employees who have been absent on account of headaches caused by the lack of glasses, poor teeth, abnormal habits and so on. I have been able to correct a good many cases, not only relieving the patient of suffering but making the employee far more efficient."

C. F. Hathaway and Sons say that flowers and personal calls are important in cases of sickness and death and each new arrival receives five dollars to start a bank account. One solution of the plan is that suggested by a manager in these few words: "I keep in touch with the health of department heads and they with others.

The service department does the rest." As defining the limitations of the plan, one manufacturer says that they are at the point where the personal overshadows business relationships. Another manager would limit any action to the spoken word.

Questions eleven and twelve brought some interesting answers as there were divided opinions. The questions read: "Do you see a value in the policy of the chief executive who has 'walk in' printed on his office door for all who read it, down to the porter? What objection do you see to such a plan?" Many took the question literally and so while in sympathy with what might be called "an open door policy" did actually suggest leaving the office door open rather than labeling it "walk in." Of course, what was intended of these two questions was to bring out the value of having men feel that they had access to the head of their firm as a matter of course. "Certainly" is the answer a Massachusetts manager gives, "Any executive handling men should be approachable and known to be so." An interesting point is made in the letter written by A. S. Bond, President of the Packard Piano Company, who says: "This sign amounts to nothing unless the executive has the confidence of his employees, and having that he does not need any such sign."

Several suggested that this policy was a wise one, although it was subject to abuse unless checked in some way. Checking, however, may exactly defeat the purpose of the plan. This is overcome in one Boston factory by having it understood that employees who fail to get satisfaction in taking the matter up with their supervisor are at liberty to come to the manager with it.

On the other side of the question such answers as this were received. "No value absolutely." "No! Work-

men feel that the sign does not apply to them." "Let action speak." "Bunk. Looks like a bluff and is."

Question thirteen was asked with the idea of bringing out various special plans for bringing workmen in closer contact with the management. It read, "One employer not long ago gave a dinner to employees who had been with him for forty years. What similar plans have you carried out to make your men feel you are all in one large family?" Picnics and outings, profit sharing plans, dinners, dances, clubs, smokers and athletic events, share about alike in the answers. Of the 47 factory executives who answered question fourteen, "Do you believe athletic association events, picnics and so on have a value from the personal relationship viewpoint?" only six answered in the negative and one other was doubtful. The president of one concern rather pessimistically writes that it organizes employees for the agitators. Another man without giving reason says, "I believe they do more harm than good." The general thought, however, is that expressed by one man in these words, "I thoroughly believe in athletic organizations and picnics as a great stimulus to a better understanding among the employees and a better knowledge of each other."



THE great thing is not only to make the man working for wages actually a partner interested with the employer, but to let him show that he has such a relation and that his welfare and the welfare of the employer are identical. When this basis is established most differences will solve themselves.

JAMES A. FARRELL,
President of the U. S. Steel Corporation

PART III—BREAKING IN AND DEVELOPING MEN

Founding a Business

UNDER the building recently erected by Butler Brothers stand one hundred and ninety-two caissons, six feet in diameter, extending down to hardpan seventy-five feet below the basement.

If, before the superstructure was erected, the earth had been excavated from about these caissons, they would have appeared like a forest of huge concrete columns rising high in the air. And yet, as one looked upon the work just before the basement was walled in, he saw no evidence of caissons; only the trampled pit. There was nothing in sight to indicate the mighty lifting power that had so patiently been prepared for the lofty structure to come.

And thus it is with a great business, although the unthinking man does not appreciate this fact. He tries to build a business upon the shallow foundation which he sees, without providing caissons that go down to the solid rock. He overlooks the fact that back of and under every great success there are years of right thinking and right doing—cemented columns of honest effort and honest dealing—which, like massive piers of concrete, will sustain that business from generation to generation.



Edward B. Butler



EDWARD B. BUTLER

Chairman of the Board of Directors of Butler Brothers

XI

FITTING INSTEAD OF FIRING MEN

By W. S. Ball

Based on an Extensive Investigation

NOTHING but firing would do for Johnson, the foreman was sure. But the superintendent looked doubtful. He explained that Johnson had been with the firm a good while, and had been considered one of its best men. All this was true, the foreman admitted, but in spite of it he insisted that the "grouch" which Johnson had been showing of late was becoming expensive.

"It wouldn't be so bad if only Johnson was affected by it," he explained. "But it's affecting the others. You can't keep a department running when one of the oldest men in it gets sulky and soldiers on his job."

"Perhaps it's something he'll get over," suggested the superintendent, "family troubles, or something like that."

"I've asked about that from those who know him," said the foreman. "There isn't a thing that I can find out to account for it. I hate to let him go, but I don't see any other way."

The superintendent pondered the case a minute.

"Perhaps we'll have to," he finally agreed. "But Johnson has been too good a man to drop in a hurry. Suppose you keep him on for another week. I'll think it over."

Now the interesting thing about this incident is that it could really happen at all. Ten years ago—five years in many shops—there would have been no hesitation at all about “firing” Johnson. A workman who developed faults that outweighed his usefulness had short shrift. Workers were usually plentiful; why bother with one who presented a personal equation that had to be solved individually?

But employers are coming to realize that, even if no other motive were involved, it costs money to break in new workers. More attention than ever before is being paid to the hiring of men, in order to secure those adapted to the work, that the waste of misfits may be avoided. Similarly, “firing” is not the light affair that it was once supposed to be.

NOWADAYS *firing is being considered as scientifically as hiring, and faults are “cured” before the worker becomes a candidate for the “blue ticket”.*

Modern efficiency believes in curing faults, if possible; in teaching those who are teachable; in transferring from one kind of work to another until the round peg fits the round hole. “Firing” is regarded as a last resort, reserved for certain flagrant sins or incompetence that have persisted through numerous opportunities.

This means that more attention than before is being given to the personal side of industrial discipline. The man who is skilful in handling men has always been an asset in any business, but today he finds himself in still greater demand. And many a worker would be amazed to know the efforts that are made by his superiors to overcome his faults or to bring out his best without resort to the fabled “blue envelope.” For this kind of discipline no fixed rule is possible. General principles

must be modified by the personal factor in individual cases. The skill of the foreman or superintendent is measured by his ability to size up motives and the forms of appeal that are most likely to prove effective. As a case in point, consider the treatment which transformed Johnson, whom the foreman wanted to discharge.

A few days after the conversation between foreman and superintendent, the latter spent some time in the foreman's department, ostensibly on business connected with an important order which was being rushed through. He noticed several apprentices working in more or less haphazard fashion, under a variety of tutelage. Nominally, they were responsible to the foreman. Actually, they seemed to be responsible only to the dictates of their own ambition, plus the authority of the nearest journeyman, for the foreman had little time to devote to instructing them.

Presently there was another heart-to-heart talk between foreman and superintendent, after which the foreman made for Johnson. "Mr. Johnson," he said, "I'm not very well satisfied with the way those apprentice boys are getting along. They bungle through their work and there isn't anybody in particular to see that they learn what they're supposed to be learning. I wish you'd keep an eye out for them as much as you have a chance to, and see that they keep on the job. Don't let it interfere with your regular work, but give them a lift when you see they need it. They're not learning what they have a right to and what we want them to, if we expect them to be of value to us."

A guttural monosyllable was the only answer Johnson saw fit to give. It might have indicated anything from distaste for the task to disapproval of the entire apprentice system. The foreman, who was skeptical, awaited

the result in some doubt. But within a week he saw a difference. In a month he was enthusiastic. The grinch had disappeared; Johnson was not merely taking a lively interest in the welfare of the apprentices; he was displaying keener satisfaction in his own work. The latent sense of responsibility had been called into play, and the factory was gaining not only from his improved work but from the greater attention given the apprentices.

The incident is a conspicuous illustration of the modern application of the theory that "firing comes last" as a remedy. The superintendent's interest in the affair, it is true, may have gone farther than it would but for the fact that he wanted to give that particular foreman a lesson in the art of management. Ten years ago Johnson would have been fired without question, the apprentices would have continued to learn in haphazard fashion, and the foreman would have missed a valuable pointer. The economic advantage of the new method is easy to recognize, if not to figure in dollars and cents.

In general, it may be said that the new type of discipline is based on the "rule of reason" to a greater extent than in any previous system. Once military discipline, with no explanations and no room for questions, was favored. If the individual did not give his best work under this system, that was supposed to be the individual's loss. The loss in shop efficiency was not considered. There are workers who still prefer that form; they have no desire to reason why; theirs but to do or—be fired. As a rule they are the ones who like to avoid responsibility. Suggestions for improved methods are not likely to come from them.

The best worker is pretty certain to be the one who appreciates a knowledge of the reasons for any deviation from routine methods. A straight appeal to reason

may even correct a fault that could be made to yield in no other way. But it must be a reason that in the mind of the worker is not trivial and one that comes within the range of his own point of view.

An employer of skilled labor, averaging about four dollars a day, noticed that a few of his two hundred men were in the habit of knocking off work to clean up about five minutes early at noon and night. If the habit were allowed to go unchecked it would have been only a matter of time when all the two hundred would be following this example. He might have corrected the offenders and then, if they persisted, discharged them. This would have remedied the difficulty, but it would have left a feeling of discontent at what the men would have considered petty tyranny. They were looking at the thing from the point of view of ten minutes or so out of a nine hour day. To them it seemed a trifling matter. No remedy that failed to correct that impression could succeed.

T*THIS manager got right down to brass tacks with the men. Waste of time stopped when the workers realized the money loss it meant to their employer.*

He might have pointed out that ten minutes of lost time for a four dollar man was approximately seven and a third cents. This would merely have translated time into terms of money and left the flavor of pettiness. It is easy to imagine that "seven and a third cents" becoming a shop joke at the expense of the employer, the effect of which would have revealed itself in a hundred ways too scattered to be recognized.

What the employer actually did was to have a talk with the most influential of the offenders, in which he pointed out what they all knew, that the industry was

in a position to expand, but that it needed additional capital with which to do so. Then, referring to the ten minutes a day which some of them were consistently wasting, he said: "Ten minutes a day wasted by each of you two hundred men would decrease the borrowing capacity of this industry over eighty-five thousand dollars." He did not have to wait for a question in order to furnish the answer; their uncomfortable laughter furnished that. He went on to show that at an average wage of four dollars a day for two hundred men, ten minutes a day meant \$14.80, which in a year of three hundred days amounted to \$4,440, and that \$4,440 was five per cent interest on more than \$85,000.

"You see, gentlemen," he concluded, "what a thing that seems insignificant to you means to the development of this business." They saw, and the petty pilfering of time stopped abruptly, while instead of ridicule and loss of respect for the employer the men had an increased respect for the significance and importance of their own jobs.



A MACHINE is a unit of a "plant investment" with very restricted limitations. It performs today what it did yesterday, provided it is well taken care of, protected from harm and abuse, oiled, fed with power and given periods for rest and repair. A worker is a human being, the highest expression of cosmic creative power, a person of peculiar inherent abilities, capable of great development, with thoughts and feelings responsive to human interest and justice.

WILLIAM ARMSTRONG FAIRBURN,
President, Diamond Match Company

XII

"GROWING" YOUR OWN EXECUTIVES

By Harry Franklin Porter,
Organization Engineer

A YOUNG workman en route home from work one afternoon was engaged in conversation by a stranger who happened to be passing the same way. After a few casual interchanges, the subject turned to the one's occupation. This was more by design than by accident, on the part of the stranger, as he cherished a fondness, which he pursued on every occasion, for investigating labor conditions from the men's side.

"That's a pretty fine place where you are employed," said he.

"Yes, I guess so," replied the workman, without enthusiasm.

"Out here in the country, with beautiful surroundings, the buildings modern and sanitary conditions excellent, I shouldn't wish for any better place if I were a shopman," continued the stranger.

"Oh, it's all right as far as that goes," was the rejoinder.

"But there is something you do not fancy about the place?" interrogated the stranger sympathetically. "Is it the pay?"

"Well, no; not exactly. They pay you pretty decent. I ain't got much kick comin' on that score."

"What is it, then, that you don't like?"

"Well, it's just this: a feller like me has no chance to get ahead. When there's a good job open, they never give one of us young fellers a show; they always hire in some new guy. I wouldn't mind if none of us could do the work; but they don't seem to care whether we can or not. I'm going to leave as soon as I get a good opening where they give a feller half a chance to get ahead." He said this with such finality that the other did not feel disposed to press the conversation further along this line. So after a few pleasantries the two parted.

This young workman, in his homely way, gave vent to a sentiment that stirs in the breast of every normal, healthy human being. It is a main propelling motive of masters of affairs; it is scarcely less a dominating force with working men in all grades. Good pay with prospect of increase is one element; agreeable occupation amidst pleasant, healthful surroundings is another; but these without the spur of promotion are inadequate to keep men satisfied, much less to stimulate them to put forth their best.

To develop men's efficiency and cement their loyalty, it is necessary to hold before them steadily a higher goal. They will even work for less pay, and tolerate annoying and discomforting conditions, if only they may be assured of a future in some degree commensurate with their ambitions. There is no line of industry today which will prove an exception to this statement.

Wise managers recognize this trait of human nature and study constantly to keep open the door of advancement in their establishments. More than this, they seek assiduously to develop the talent in the ranks. In other words, they not only strive to keep open the door, but they lend a hand in helping their workers forward to it. And experience shows that when men feel a push

from below as well as a pull from above they are spurred to the most.

Moreover, purely on economic grounds, it pays to advance the men you have. To carry out a policy of systematic development, it is true, involves some expenditure; but continually to be introducing new men from the outside is much more expensive. No matter how promising a new man may be, he is still "raw material," and before he is thoroughly trained into his new position he will be costing you more money than he is making you. One manager estimates that it costs him two hundred dollars to break in a new man and bring him up to standard. In addition, there is the effect on the general efficiency of the department to consider while the newcomer is being assimilated.

HOW *assuring workers that ability and merit will be recognized and rewarded by advancement encourages them to increased endeavor.*

Besides, the expense of training men for advancement is not nearly so great as might be supposed. Once let the information thoroughly permeate the organization that you are genuinely interested in seeing that every man has the opportunity of making the most of himself, that ability and merit will be recognized as promptly as possible and be rewarded by promotion, and automatically each workman in the establishment who has a spark of ambition in him will begin to prepare himself for something better. During work hours he will keep his eyes and ears open to pick up every scrap of information he can. Place a library at his disposal and you will find him taking advantage of it at every occasion. He will even begin to pursue studies in a night school, if the community affords this advantage, or take

up a correspondence course. Thus the amount of special training you will have to provide will be small comparatively, and the expense involved viewed as an investment—which it really is—will yield particularly rich returns.

This policy is wise also from another angle. No one knows the day and the hour that the most important position in the organization may become vacant, through the exigencies of death or otherwise; and the further down the line you go the greater are the possibilities of unexpected gaps occurring. To be prepared at all times, therefore, to meet any emergency in this respect from within your own ranks is simple business foresight. It is comparable to carrying fire insurance against the ever-impending blaze.

So, when a vacancy occurs the first place to look for a new occupant is in your own factory. Give your own men the first chance in every case. More than this, be looking ahead constantly to help qualify likely fellows for possible openings. Then you may be sure that you are doing all you can not only to safeguard your organization, but to instill and foster in it that most energizing of all forces in man's nature—*hope*.

"The one thing beyond all others that is needed for success," declared one of the foremost industrial engineers in the country at a recent meeting of the Efficiency Society, "whether it be the success of the worker or the success of the intellectual man, is hope. This is the most important element to foster, cherish and keep in the minds of all working men. In order to give hope you must first of all have in your mind, in the bottom of your heart, the welfare of your men. The moment a manager takes this for his ideal, the moment he says, 'It is my duty in life to develop our men,' he

will see that it is the part of management to do an enormously larger amount of work than has ever been done in the past in teaching, in training, in helping men. Scientific management does not come into existence until the owners of a business, all those on the management side, have the building up of their men, the development of their men, as absolutely the first thought in their minds."

Men often develop faster than there is opportunity for their advancement. When they do, it is a healthy sign; but therewith comes a complication of the manager's problem. Workers who are too good for their positions are the most difficult of all to keep satisfied. They are like a stream whose waters have been dammed up. Some will overflow into criticism and complaint, which affects adversely both the *esprit de corps* and their own efficiency—if they but knew it. Others will sulk themselves into stagnation, the effect of which is almost equally demoralizing. Still others will pass on and out at the first opportunity, oftentimes to their betterment, as often not. Whether to their loss or their gain, it is, in any event, to the management's loss, both directly and indirectly—through the creation of a spirit of unrest and dissatisfaction in the ranks. There is only one way to combat this situation: take the initiative yourself in finding good positions elsewhere for those who have outgrown your establishment. This is the policy of a number of broad-minded and far-seeing managers. These figure that it pays occasionally to promote a man outside for the sake of keeping the organization keyed up to the highest pitch.

On the other hand, nothing could be more disastrous to a factory than to have it looked upon as a mere training school for other places. This is a tendency the

manager must rigorously oppose. Various counteractives will suggest themselves. Higher pay, better working conditions, a more advantageous benefit and pension plan than elsewhere; the ownership of homes in the vicinity; profit-sharing; opportunity to become stockholders—these are a few of the measures that have been found effective in holding good men. To make promotion in all cases, whether outside the organization or within, contingent upon training of a successor, also is beneficial. It acts like a governor upon ambitious young bloods. In their impatience, these frequently err in thinking that they are ready for advancement when they are not. The test is their willingness and ability to teach someone else their job. Surely no one is qualified better or more economically to instruct another than he who has become so expert in a task that he is ready to take a step higher. Rarely does such a test fail to detect any weakness. And the mere doing of it increases his value. Thus the benefit is twofold.

HOW *the promotion of employees can be handled so as to attain the best results. Why promoting men from the ranks acts as a general incentive.*

A large organization, where operations are highly departmentalized and specialized, seldom has to resort to the expedient of outside promotion. For within the works, as a rule, there is abundant opportunity to use all the ability that may be developed and the advancement possible is such as to satisfy the desires of the most ambitious. On this account the larger plants, if also they are highly efficient, tend to attract the cream of the talent, just as our thriving metropolitan cities are lodestones for the best blood of the rural districts and small towns. Consequently the smaller a plant the greater is

the need for an adequate scheme of promotion which will include graduation to higher positions elsewhere.

Merit, of course, must be the first basis of advancement. Length of service needs also to be weighed, but only when other things are equal may it safely be given first consideration. Nothing could be more dampening than to make seniority the chief test. On the other hand, the effect is almost equally dispiriting of failure properly to weigh this element. Faithful service always is deserving of its due reward. Relationship to one in authority or any personal claim to favor, needless to say, can have no place if the scheme of promotion is to succeed. The only safe way is to judge men strictly and impartially on their records.

Merit also must be the chief criterion in bringing in an outsider. However excellent is the policy of filling vacancies from the ranks, inflexible adherence to it is sure to result in a gradual letting down all along the line. Give your own men the first chance but do not hesitate to introduce new blood if the issue has narrowed to one of fitness purely. When your men know that vacancies will be filled this way, in case none of them is sufficiently developed to qualify, they will be stimulated to increased endeavor. Moreover, occasionally it pays to bring in a new man for the sake of the invigorating reaction of a fresh viewpoint upon the atmosphere of the shop. But guard carefully lest this departure from the established rule be construed as an undue discrimination against old hands.

Rarely is it necessary to have recourse to an outside supply, except of course for beginners and common or unskilled labor, and as a rule all newcomers, regardless of their previous experience, should start in at the lowest level. From these should come the semi-skilled work-

men, and from this class the skilled machine operators and tool makers. Normally in turn the skilled class should furnish the foremen and other responsible heads. But because a man is an excellent workman, it does not follow always that he will make a satisfactory shop executive. As a matter of fact, it is the experience of managers that the best mechanics often make the poorest foremen. "We promote a man from the ranks whenever we can," said one manufacturer, "for we prefer a foreman who has intimate, practical knowledge of the work he is to supervise. Unfortunately, however, few workmen possess the qualities essential to success as a foreman.

Leadership ability we deem more important than ability actually to do the work, for a bright fellow who knows how to handle men will soon enough learn the other part of it. Therefore, we do not hesitate to go outside to get the man we want." Often, too, a workman elevated from the ranks who has the making of a good foreman will fail to fulfill expectations because of his inability to work himself free from his former associations. "Familiarity breeds contempt." If he has the right stuff in him, however, and receives the proper backing from above, he will in time overcome this handicap. It is wise, at any rate, to give one of your own men a fair trial, for the sake of the encouragement thereby afforded the remainder of the good men in the department. Besides, you have accurate knowledge of one who has won his spurs as a workman, whereas a newcomer, no matter how promising, always is more or less of an uncertain quantity.

One manager found effective the expedient of getting his foremen from other departments. For instance, he took a high-grade foundryman and made him foreman

of the chippers and grinders. For his chief product inspector he took a foundry clerk; for superintendent of factory transportation, he took a checker in the shipping room. Occasionally he drafted a foreman from one department for service in another. In this way he avoided both the incubus of familiarity that attaches to a workman elevated to the foremanship in his own department and the dispiriting effect that attends the bringing-in of a total outsider. As he exercised rare discretion in picking his men for their leadership qualities and keenness of observation, he almost never scored a failure. An unexpected gain incidentally resulted. Men shifted from an initial to a final department showed greater patience with the shortcomings of preceding departments and were more constructive in their criticisms thereof, while those transferred in the reverse direction evinced an uncommonly deep interest in all the details of the work that affected the production of succeeding departments. A higher standard of workmanship thus was promoted throughout the plant.

SOMETIMES good results can be obtained by departing from the beaten track, and promoting men of specialized knowledge into positions in other departments.

This same expedient often is equally successful with respect to the positions of broader executive responsibility. An Iowa manufacturer of agricultural machinery, for instance, when his establishment had grown so large that he felt the need of an assistant to himself, called to the post the sales manager of one of his branch offices. He did this in lieu of promoting his superintendent because he wished to have more of the sales viewpoint impressed upon the shop. The new manager was handicapped, of course, by his lack of

practical experience in manufacturing, but he knew what constituted a salable product. Besides, he was possessed of a keen observation and no little executive ability, and in the course of a year or two, under the careful tutelage of the president, he demonstrated his worth completely.

Quite the reverse were the reasons of a Pennsylvania metal furniture manufacturer for choosing for his new general manager, to have direction of both production and sales, his shop superintendent. He had been troubled for years with a flood of special orders and he wished to have one in control of the two ends of the business who had a vivid appreciation of the effect on manufacturing costs of promiscuous departures from standard. The new executive speedily proved his value by training the sales force to push regular lines almost exclusively.

Logically, foremen should be in line of promotion for the higher positions. More infrequently, though, are these qualified for larger responsibility than workmen are fitted for foremanships. For one reason they usually lack the broad outlook requisite. Again, for men who shall have general direction of work, some technical qualifications are preferable if not essential. It is a rare foreman who is fortified for advancement in this respect. Accordingly, for the higher positions the source of supply must of necessity be largely outside.

But the demand for men of this type is always in excess of the supply. Full-fledged superintendents and factory managers are not often found foot-loose and free, waiting to be snapped up by the first comer. It is necessary as a rule to bid for the service of such, and sometimes to bid high. Even then it may be impossible to get the man you need when you need him.

In anticipation of the usual difficulty a Wisconsin maker of sanitary ware, foreseeing the necessity of replacing his superintendent by a younger and more energetic man with a broader and more scientific viewpoint, hired a young engineer graduate who had a year or two of practical experience along efficiency lines. He kept him at this same sort of work for several years, moving him from operation to operation until the entire round had been covered. Then, one day, as if by no intention, the young engineer was put in charge of a department. He is succeeding splendidly and it is only a question of time before, again as if without design, he will be advanced to the superintendency. Some day he will be called still higher.

Similarly it is the practice of a number of leading manufacturing concerns to take on every year one or more promising technical school graduates with a view to the future. These are started at the bottom, pushed forward as rapidly as possible from one class of work to another until finally, if they demonstrate the proper aptitude for shop life, they are elevated to positions of executive responsibility. By this means the occasion for departing from the established policy of filling all vacancies from the ranks, even in the case of the highest positions, is reduced to a minimum.



IF IN the days to come, as you have to do with labor, you will put yourself in the other man's place and govern your action by what you would wish done to you were you the employee instead of the employer the problem of the establishment of the personal relation in industry would be solved."

JOHN D. ROCKEFELLER JR.
*A piece of labor handling advice given
students of Cornell University*

XIII

THE BUILDING OF MEN

An Interview with Edward B. Butler,
Chairman of the Board of Directors of Butler Brothers
By Carroll D. Murphy

EVERY business concern, whether large or small, is eagerly looking for men of promise. And it is the experience of nearly all that they can find such men, but the difficulty lies in their inability to hold them. It is no longer considered a misfortune, as it was thirty years ago, for a young man to change about from position to position. Again, there are too few who are willing to work hard, even though they must know that a large measure of success awaits the result of their labor.

To get men to work with anything like the same interest you have in your own business, you must show them that you are relying upon them. We all have our responsibilities. Too many young fellows feel that they have none. In any great business, the employee is responsible for the good opinion of that house. Quoting Mr. Butler "we like to remind our people that when a voice goes to a customer over the telephone, it is Butler Brothers who is speaking. When an usher meets a customer at the front door, it is Butler Brothers shaking hands with that merchant. And, by the way, you can, in a measure at least, judge the house by the tone of voice which comes to you over its telephone, just as you can at times judge the head of a house by the attitude of the usher whom you meet at the entrance."

Responsibility extends beyond the routine work. He who does his work by rule may think he does his duty, but the man who reaches the higher place is the one who does his duty and a little more. One man, in passing through the hallway, discovers that a window has been left open and that the rain has been beating in. It may not be that man's business to close windows. That belongs to the operating department. But passing by, he gives the matter a thought and closes the window. Another man would not have done it. It is the one who closed the window who is the most valuable man. He thinks.

MANAGERS of men should remember that they are directing men and not machines—the occasional friendly word often gives a spur to more effective work.

It is difficult to get some men to let go of details; to grow up into control; to think for the men who do not think. In every business there is some one man who can do the work of three. The trouble is that, as an individual, he cannot do more. To capitalize that man's ability, he should be put in charge of three dozen men, and he should be taught to direct the energy of all.

Any man who is at the head of a business that has grown to large proportions naturally has a keen interest in the future of that business—in its continuation after he has gone. His greatest concern will naturally be in the building of the men who are to become its future leaders. But one man's efforts alone will not go far to develop the necessary individual interest and initiative. The department heads all along the line must keep up this work. The head of every sub-department also must become acquainted with his people.

Not only must he know them in their hours of work, but he must know something of their home life as well. The head of a department should so organize his force that his people become almost as a family group. The boy in this department oftentimes needs brotherly advice which his chief can give him better than anyone else. It is in such a department that the "Good night" to one another is heard as they leave for their homes. It is in just such ways as this that the department head can supply that spirit of good-fellowship which is so generally lacking in the big house.

You will hear a good deal, in almost any business, about letting the new man or new boy "work out his own salvation," but that does not mean that he is not to be taught. He must be helped. If not, the average man will soon lose any enthusiasm that he may have had. A word of encouragement and suggestion from his chief will often set him on the right track. If he is making good, tell him so.

In a big modern business, the head of a department is so busy that he often forgets the value of the departmental family spirit, and being out of personal touch with his people, he is unintentionally unfair at times. One of his men comes in late; but, being a stoic, he offers no excuse. He goes about his work carrying his burden alone. It may be that at home he has a sick mother with whom he has been up all night. In the little business, this fact would have been known by his superior, and the question in the morning would have been: "How is the mother?"

That thoughtful question would have made a big difference to the worker. The right kind of comradeship in a department is, as you will see, all-important in the development of good people for a business.

Without the right men, you cannot have the right spirit. Without the right spirit, you cannot have the right men. Spirit is the most valuable asset that a house can possess. Spirit is something you cannot make. It is something you cannot buy. It has to grow. It grows out of a belief in the heads of a business. It is a plant so delicate that it cannot survive in an atmosphere of favoritism, or where push or pull has any place.

One of the vice-presidents of Butler Brothers likes to tell about his first day with the house. He started in as a lad of sixteen, and on the first day was set at work sewing buttons on sample cards. The day was hot and sultry. The work of pushing the needle through the stiff cards had hurt his fingers. He was to receive three dollars a week, and he says that by noon he had planned exactly what he was going to do about the half-dollar he was to earn for the first day's work. He wasn't coming back for it, as he had decided. He was through with that job.

But he tells that during the afternoon one of the members of the firm came to him and said, "You are sewing those buttons on very nicely, but you are not doing it in the best way, and you are hurting your fingers. Let me show you how to do it." The result was that instead of quitting his job, he went home, and, flushed with pleasure, told his mother how a member of the firm had complimented him and then had shown him a better way to do his work. His enthusiasm responded to this first sign of encouragement and he has since been one of the strongest forces in the development of a great business. How costly to that business would have been the loss of that man!

This illustration goes to show the importance of giving every one a fair chance. The wise department man will

listen to suggestions from the smallest boy in his group. In this manner some heretofore unknown young man may reveal himself.

It is a great thing to discover a man. Think what it would mean to discover in the form of an untried youth one who was destined to become a great business genius. Or, better still, to help a man to discover himself—to find himself. Some men find themselves easier and earlier than others. Many men have a seed of ability, to develop which needs only the kindly encouragement of their superiors.

If you know of any men who have fallen into the habit of thinking that others have appropriated all of the opportunities, that none are left to them, just tell them to think their way out of that belief. And if they will do that, they will have made a good start toward that future thinking which so certainly means success.



THE average young man is going to develop in business according to the training he receives. In taking young men into our organization, we therefore assume somewhat of a moral responsibility. They consign themselves to us as so much raw material. It is not only up to us to help them make good, but to stand behind them and back them up while they are in the process of "making good".

C. H. SLOCUM,

President of the St. Paul Book and Stationery Co.

XIV

SHAPING MEN TO THE WORK

By C. H. Slocum,

President of the St. Paul Book and Stationery Company

TRAINING employees, shaping men to the work and methods of a business—developing in them initiative, responsibility, enthusiasm, cooperation, integrity, and loyalty—is preeminently a human problem. At least, so I have found it.

Years of experience in hiring and firing have disclosed to me no standardized system of methods by which I might measure in advance the capabilities of a worker. By experiment and test, by watchfulness and development, we find out men. In employing new people we try to select those who can be built into our business. The kind of men we are looking for today is the kind we will need in our business tomorrow.

Practically every department manager with us today started in as an office boy or in some minor position. The secretary and treasurer of our firm began as salesmen on the retail floor. These men have come up through the ranks with the development of our business. They are always on the keen lookout for ways of bettering their departments and the business as a whole.

The best little promoter of enthusiasm, integrity, and loyalty among employees that I know of is the Almighty Dollar—given where it is earned. A few months ago a young man came to us and applied for a position. We liked his appearance and gave him a place in our ship-

ping department. His job was to wrap up packages. We started him in at \$45 a month. In less than six weeks the department manager came to me and said that this young man was worth more money; that he was economical, conscientious, and a swift, careful workman and had made an excellent record.

We raised this young man's salary and dated it back two weeks. This gave him such an incentive for better work that he soon worked himself out of the shipping department. We changed him to another position and gave him more responsibility. We will keep on changing him until he has gained a thorough knowledge of our business. In a few months he will have a better position and his salary will keep pace with his advancement.

Each department manager has strict orders that as soon as an employee in a department is actually worth more money to the firm that their salary shall be raised immediately. We do not wait for the first of the month. Forty to fifty employees received a raise recently and not one of them asked for more money. We are not running a philanthropic institution, but if we expect fairness from our employees, we first must be fair in our dealings with them.

In our organization we have many young men. We prefer them. We pick up bright young fellows and train them in our way of doing things. The average young man is going to develop in business according to the training he receives. In taking young men into our organization, we therefore assume somewhat of a moral responsibility. They consign themselves to us as so much raw material. It is not only up to us to help them make good, but to stand behind them and back them up while they are in the process of "making

good." If they eventually grow beyond us, that is our fault, but we try not to let good men go.

Our business is well divided by departments and our employees are trained by departments. While every employee is hired to do a certain class of work in a specific department, we frequently change them from one department to another so that they gradually come to have a working knowledge of the business as a whole. Whenever we are short handed in one department we know that we can draft men from other departments to fill up the gap. While these men may not work as rapidly as those who are employed regularly in the department, they produce efficient results and enable us to get today's work done today and at the same time keep our whole organization up to a high working standard. This applies particularly to our operating departments.

HOW employees are so initiated into the business that few mistakes are made and they are less likely to become discouraged at the start.

A large portion of our business is handled through our mail-order department. We are doing business in every state and in many foreign countries. This business is handled by direct mail methods. Here we must take precautionary measures against possible mistakes. Regardless of the fact that every order is checked by a number of individuals before it is forwarded, we believe we are avoiding many needless mistakes by first giving each employee a thorough working knowledge of our business before starting them in at the work they have been employed to do. We accomplish this by starting new employees in on a class of work we term "Show Me's." This may be anything in the nature of a com-

plaint. First, the employee is given the correspondence which states the complaint. We will say that a shortage has occurred in a shipment of books. As each customer's order comes in it is put on a card and filed alphabetically. This card contains all the information regarding the order. The first step is to get this card and the order number. Next, a duplicate copy of the order sheet will be found on file in the departments which filled the order. This information is gathered and taken to the shipping department where it is compared with the duplicate shipping ticket. If these duplicates correspond, then we know that the mistake has occurred at the other end of the line or in transit. This information is attached to the correspondence and returned to my desk.

The point is that the young man who made this investigation has come in actual contact with a number of departments and managers. Everyone with whom he has come in contact has helped him gather all available information regarding this complaint. In a short time this work will have shown him the working principles of every department in our business. When something comes up while this man is working at his own job—something which requires a knowledge of the work in other departments—this man will know or will be able to act quickly.

This experience helps a new man to quickly lose any feeling of strangeness which he probably had when he started in. Unconsciously, he has been learning our business methods. If we had tried to explain these same methods by word we might have had a sorry job of it. And if the applicant did not grasp at once what we were driving at, he probably would become discouraged before he began. Instead of this happening, he actually

acted out every method connected with his work. This makes it easier for the employee, gives him confidence and faith, and once having this experience he is less liable to make mistakes.

However, mistakes happen. We all make them. Not long ago we received an order for thirty calendars from a school teacher in a country district. This order arrived during the Christmas rush. We were out of the particular calendar ordered. A young man in the department which would ordinarily fill this order knew that by ordering direct from the factory these calendars would reach the customer on time. In making out the order he put down 330 calendars instead of 30. The factory made the shipment. And the school teacher promptly informed us that she had not intended to embark in the calendar business. We wrote this customer to take whatever number she could use and forward the balance to us at our expense. The man who made the mistake simply wilted. Of course it was a bad blunder. However, this mistake was not charged up to the employee. We bought new calendar date pads and sold these goods for use the following season.

When a mistake occurs, regardless of who made it, we do not raise a merry row. Instead, we go to the employee at fault and say something like this, "Now this mistake has been made. We know that it did not happen intentionally. It is all right and will not be charged against you. Next time do it so and so." And the incident is closed. When employees make mistakes the natural inclination is for them to get flustered. Sometimes they lose courage and confidence in themselves. We try to prevent this. If an employee is afraid to go ahead, loses initiative, keeps running to the department head or other workers for this and that and the other

thing, then they not only waste time with their own work, but waste the time of others and upset the mental equipoise of their department. The losses we make good on employees' mistakes are more than paid back to us through the saving of time, the development of initiative, and the value of confidence our workers have in themselves. Of course, if an employee persists in making mistakes continually he must go.

FROM the time he starts the eyes of the management are upon the worker—questions affecting him are not considered haphazardly, but from the personal angle.

A closer study of the lines of our work which interests an ambitious employee helps us in selecting our men. We try to find the work which the employee likes to do best. We can do this only by watchfulness, experiment, and test. Five years ago a young chap came to us and applied for a position which was open in our library department. He happened to slide into a position which held his interest from the beginning. Today he is in charge of the department, handles all the correspondence connected with it, and is responsible for its management. More often than not, the reverse situation occurs. Then we must find a job for the man. Sometimes this is not possible. If people are entirely unsuited for the work they are doing we advise them to make a change and try another line. Occasionally employees slow up in their work. Perhaps we all do. Most of us get back to normal in a day or so and simply say that yesterday was an off day. Once in awhile we find an employee who slows up and doesn't "come back." Such a case happened not long ago. This young man did his work but lacked "pep" and enthusiasm. He was not looking ahead for the other fellow's job. I discovered that

when a rush of work came through his department he kept up his own, yet he never got ahead of it or offered to help the other boys. I decided that "watchful waiting" would bring results in this case.

Several employees in this department who were doing well received an increase in their salary. The young man in question did not. Shortly after he came into my office. He told me that it had been some time since he had had a raise and reminded me of the fact that another employee in the same department had received two in six months. I did not find fault. I simply explained that while he was earning what we were paying him he was not progressing and certainly was not worth any more money at the present time. He saw the point. Not long after this the manager of this department told me that this young chap was worth more money. He got his raise on the dot. Now he is doing fine.

Off and on, we check the general efficiency of our employees. This is done by departments. In our book stock rooms we have our book pickers make a daily report giving the number of each order filled and the number of books on each order. If a man is only picking five hundred books on thirty orders, and we know that he should be able to pick a thousand books in the same amount of time, we bring this fact before his attention. The check itself keeps the men up to maximum. They know what is expected and that they must deliver full measure. Other department employees are checked by general reports on their daily work. Stenographers and billers are checked periodically as to speed and accuracy.

Every morning a report is made from our time-clock and placed on my desk. This enables me to see what employees registered late and those who have not re-

ported. We do not dock a late employee or one who is on the sick list. An employee registering late puts a red circle around his late mark. If this happens regularly the department head calls the employees' attention to the fact and an explanation is in order.

Whenever anything goes wrong with an employee's work or discipline, we do not call his attention to the error in the hearing of other employees. Whenever an employer places an employee in an embarrassing position before others, he needlessly creates a sore spot in the employee's mind which is bound to react on the efficiency of the work and in many cases on the attitude of other employees. We use inserts in our pay envelopes to call attention to trivial errors on the part of employees and the more serious things are taken up in person by the department manager or myself in the office.

What we aim to do is to make our employees glad to work for and with our company. We want them to feel that we not only do appreciate their earnest efforts, but that we are always ready to pay for good work well done. We try to make them realize that there is a place at the top for the man who makes good.



WE TRY *never to hire a man who cannot smile. We know that a habitual "grouch", if he happens to be in our employ, is a sure source of complaints. The man, however, who is naturally friendly, who has a smile just under the surface, will make and keep friends for us.*

E. M. STATLER,
President of Hotels Statler Company, Inc.

PART IV—PUTTING MORE THAN MONEY IN PAY ENVELOPES

Making Partners of Workers

THE biggest problem of the employer is to provide a stable, happy operating force which will work with him as well as for him. It is the problem of every business—whether the business employs five men or nearly a quarter of a million men, as in the case of the United States Steel Corporation.

As the number of men increases, the complexities increase and the impersonal character of the corporation enters. Reduced to their elements, however, big business and little business have much the same points to be solved. They each have the individual workman eventually to deal with; no matter how pretentious the plan, it will fail unless the individual is the controlling consideration—unless the plan makes “boosters” out of “kickers.”

The great thing is not only to make the man working for wages actually a partner interested with the employer, but to let him show that he has such a relation and that his welfare and the welfare of the employer are identical. When this basis is established most differences will solve themselves.

Edgar Allan Poe



JAMES A. FARRELL

President of the United States Steel Corporation

XV

PROFIT SHARING— ITS SUCCESSES AND FAILURES

By Boyd Fisher,

Vice-president of the Executives' Club of Detroit

CONSIDERED merely as a stimulus to increased production and greater net gains, profit sharing is of particular value in plants where:

(a) Individual efficiency can not yet be exactly measured, or where—

(b) Much work is done away from supervision, or where—

(c) Longevity of service is necessary to preserve quality of product or to guard trade secrets, or where—

(d) A supplement to wage-payment systems promoting individual efficiency is needed to minimize plant waste.

In other cases, where the motives are merely practical, better results are obtained by improvements in working conditions, by increases in wages equal to the desired share in the profits, and by the payment of these increased wages upon the basis of individual efficiency.

There are, in other words, limitations upon profit sharing as an economic incentive. In all the four cases listed it succeeds in increasing individual efficiency only by influencing the entire working force.

Its effect is like opening a window in a superheated school room—it increases the alertness of individuals by freshening the air for the whole class. For bettering

results in regard to the factors that apply equally to the whole working force, like the minimizing of waste and idleness, the reduction of needed supervision and the breeding of good will between workers, it is admirable when sincerely undertaken. But, just as no school teacher would expect to get the best work from a class of children by merely providing proper heat and ventilation, so, no manager should expect to obtain the best output from each man by merely creating a good working spirit.

Profit sharing is probably impotent, in its direct effects, to stimulate output. While the workman may hope that everybody will work hard enough to increase his share of the profits, he hardly grasps the point of his working harder to increase everybody's share. It is beyond his field of vision.

PROFIT *sharing for employees under most conditions is profit making for the business only when a strong personal incentive impels the men to increased effort.*

Only an individual incentive will produce the utmost individual results. Only a piecework, premium or bonus system of pay, based upon a definite and scientifically-established task, will stimulate the fullest output of which the operative is normally capable.

The task idea is to be strongly favored as an addition to profit sharing. If a choice must be made between them—though there is no practical difficulty in combining them—the task idea is preferable.

In spite of the limitations restricting profit sharing, however, and apart from the altruistic justifications of the idea, there are certain situations in business in which profit sharing for the men is, at the same time, profit making for the business. The first of these is the con-

dition where individual efficiency can not yet be exactly measured.

Advanced protagonists of scientific management do not admit that any field of work exists which can not in the course of time be standardized. They admit, however, that some kinds of manual labor do not yet admit of exact measurement. There are assuredly many which managers have not attempted to measure.

These classes of work suffer from the disadvantages which business men are most ready to point out when labor advocates demand uniform wage scales. They do not, that is to say, stimulate initiative and hope; they do not permit rewards for individual care and skill.

It is in industries in which such conditions prevail that profit sharing is especially to be commended. Where workmen can not be individually rewarded for extra effort, they can be encouraged to greater cooperation by a share in the gains of their joint labor.

Sometimes it is only one or two departments in a plant which suffer from these handicaps. The Metal Products Company in Detroit meets a situation where from twenty-five to fifty men work in a gang assembling axles, and the like, by paying the entire gang a piece rate.

A business which apparently has to work its entire force as one big gang is The Procter and Gamble Company, which manufactures soap and other products at Ivorydale, Ohio. When I visited this plant I was impressed with the huge vats of Ivory Soap, three stories high, containing 275,000 pounds of material, which are kept constantly boiling for seven days.

Obviously it would be impossible to measure the contributions of all the shifts and workmen in the making of one of these vats of soap. The company can only

promote a general spirit of loyalty and interest in the business by first picking intelligent, conscientious men, and then rewarding them with a share in the profits of the company. The Procter and Gamble Company has done this by means of a stock-sharing scheme which has become the model for the country.

Another class of business which does not easily admit of standards for measuring efficiency, and which, therefore, is a proper field for profit sharing, is the manufacture of illuminating gas. The great metropolitan gas companies of England were the first to recognize this, and they have for twenty years maintained a profit-sharing plan that links up features involving saving funds and stock sharing. The Boston Consolidated Gas Company, in this country, has a profit-sharing scheme.

In fact, we may say that all businesses which handle large quantities of raw material are likely to involve processes in which individual efficiency can not be measured. The Solvay Process Company of Syracuse and Detroit, the Edison Electric Illuminating Company of Brooklyn and the General Ice Delivery Company of Detroit all fall under this heading and all use profit-sharing plans.

Another business which many people may contend can not be fairly standardized is the printing business. This contention is held open to dispute. But it is well to classify the profit-sharing plan used by the Houghton Mifflin Company at Boston as one which owes its validity to the fact that a more definite incentive could not be discovered.

There is another type of business in which there exists a similar reason for sharing profits: where a large portion of the work is done away from supervision, very much the same difficulty in appraising the faithfulness

of the average worker appears. In all such businesses the expedient of making the workman a partner with the management not alone gives him an interest in the results of good work, but also puts him on honor toward his fellow workmen to do his best, whether adequately supervised or not.

SOME of the history of early, but successful, profit-sharing plans. Most plans of this nature are directly pointed toward stabilizing the working force.

The first profit-sharing scheme to attain great success because of this principle was that inaugurated by Leclaire in 1842. The Maison Leclaire was a house-painting company in Paris. Quite obviously, when two or three painters are dispatched, with or without a foreman, they can not be supervised as closely with regard to how fast or how thoroughly and carefully they do their work as can operatives in a manufacturing plant. They are too far removed from supervision.

The latter are always to be found in an assigned station and are inspected from time to time in a routine way. But if paint be improperly mixed or badly applied, the negligence does not show immediately. And if the company is never asked to paint the same house again, the management has no way of knowing whether the loss of business was due to carelessness on the part of the workmen or not.

It is reasonably certain that Leclaire's motive in establishing a profit-sharing scheme was purely altruistic, because, merely to secure good work, he did not need to go so far as he did in making the workmen in his company owners of the stock in it. But it is also true that the success of his plan came mainly from the fact that profit sharing proved to be such an effective cor-

rective of careless workmanship that it greatly increased the earnings of his business.

Another French example of profit sharing is the Bon Marché, a department store in Paris with an annual turnover of forty-five million dollars. Today all of the company's nine million dollars' worth of stock is held by either present or retired workers.

This profit-sharing scheme, which was inaugurated in 1880, does not owe its inception to the difficulty of supervising the retail sales force. Mme. Aristide Boucicaut, the widow of the founder of the business, made the principal assistants partners with her in order that she, although inexperienced herself in merchandising, might secure loyal service with less direction. The plan was extended, however, to all her workers and succeeded mainly because, although supervision is possible in a department store, it is not generally effective unless the members of the sales force are keenly interested in the welfare of each customer.

Every manufacturer realizes the importance of a stable working force. Most profit-sharing plans, in fact, look more to stabilizing the force than to increasing profits through the incentive of larger volumes of production. The mere cost of hiring and breaking in new men, running according to various estimates all the way from twenty-five dollars to two hundred dollars per man, is a potent incentive to the adoption of methods for binding men more closely to their jobs.



THE business world needs today more who are willing to listen to the opinions of others and weigh them.

CLARENCE M. WOOLLEY,
President of the American Radiator Company

XVI

PROFIT SHARING: WHEN? WHY? HOW?

By James A. Farrell,
President of the United States Steel Corporation

THE Steel Corporation has given a vast amount of thought and many millions of dollars to the promoting of a mutual interest with its workers. Our systems are working out very satisfactorily, and I think they are resulting thus happily because they are founded upon the individual instead of being forced upon him.

The entire system is planned with the thought of securing the active cooperation of the individual workman for his own and for the company's benefit. And I think that we have removed every trace of the unfortunate antagonism that sometimes obtains between capital and labor. The men feel that the corporation is vitally interested in them and does not consider them as tools to be worn out and thrown aside.

The whole work of making the employee an integral part of the corporation divides itself into four broad heads:

1. Stock-purchasing plan
2. Pension and relief
3. Safety first—the guarding of the men from injury
4. Welfare—the bettering of conditions of work and housing

Each of these activities has done its part toward causing the employees to cooperate with one another and with the corporation. One activity can hardly be preferred to another as the more valuable in contributing to the sentiment of mutual interest. One man may best like the opportunity to make money on his stock; another man may work well because he sees a pension ahead; while still another may most deeply appreciate the safeguards and healthful conditions about his work.

HOW it has been made possible for employees to become stockholders. \$12,000,000 is available for pensions and relief work among workers.

The first of the plans to give the employee a share in the corporation's earnings was adopted in 1903, when the stock subscription plan was inaugurated. It is profit sharing in the best sense because the employee is urged to pool his fortunes with the company by buying stock out of his savings. The employee thus gains an interest identical with the larger stockholders and no additional self-interest is interposed between the corporation and its owners—the stockholders.

When the plan was put into effect it was not generally understood by the employees, many of whom had very vague ideas as to what stock was. But the officers of the corporation explained the nature of the investment to the men everywhere and now some fifty thousand employees hold approximately one hundred and fifty thousand shares of stock.

The plan is very simple. The company acts as the purchasing agent of stock for the men. The number of shares to which any employee may subscribe is graded according to his salary, the relative proportion being

greater for the earners of low wages than for the earners of higher wages. He takes the stock at somewhat less than the current market price, and pays for it in monthly instalments. The minimum payments vary according to the market price of the stock and run from two dollars to three dollars per month for the preferred to between one dollar and twenty-five cents and one dollar and fifty cents for the common. A workman is not permitted to pay in more than twenty-five per cent of his monthly earnings. The company adds to the stock thus purchased a premium or bonus during the first five years; this is five dollars a year for each share of stock.

If a subscription is not paid, the employee may cancel it. What he has paid will be returned to him with five per cent interest. Premiums are not paid to those who cancel their subscriptions, sell their stock or leave the employment of the company. These forfeited or unpaid premiums are thrown into a fund to be divided pro rata among the remaining subscribers at the end of the five-year period. If the subscriber dies before he has completed his payments, the premiums are paid to his estate for the full five-year period.

The men are real stockholders and not mere recipients of the company's largess. They earn their stock with their own money and they are vitally interested in the progress of the corporation. Before annual meetings the stockholders in many of the plants elect representatives to go to the meeting. They do this entirely of their own volition and not through any prompting on the part of the officers. These men, their expenses being paid by their constituents, attend the meeting, and many of them speak from the workingmen's point of view. They enter actively into the deliberations and make valuable suggestions. Nothing could be finer than the effect of

this mingling of the workers in the field with the more or less absentee stockholders. The exchange of ideas is infinitely helpful.

We like to have the men know that if they stand by us during their active years, we will take care of their old age. Hence the pension fund, which amounts to twelve million dollars, one-third having been contributed by Mr. Andrew Carnegie and the balance by the Steel Corporation. Pensions are paid, after twenty years of service, to men above the age of sixty-five, and to women after the age of fifty-five, on the basis of one per cent of the average monthly earnings for the last ten years before retirement, multiplied by the number of years of service. The minimum pension is twelve dollars per month and the maximum is one hundred dollars per month. The average is twenty dollars and thirty cents. The number of pensioners is now a little over three thousand.

SAFEGUARDING *the employee at work. How the safety-first committee operates. How the men help the committee and why it pays.*

The accident relief plan was started in 1910; it is now superseded by the compensation laws of the states in many places. The essential feature was the entire disregarding of legal liability or formality in application. During one year the various companies paid an aggregate of \$2,564,839, which was eighty-five per cent of all the expenditures in casualty matters. Suits were brought in less than a quarter of one per cent of all accidents.

The safety-first campaign has not only saved nearly thirteen thousand persons from serious injury within the past six years, but it has given a new angle and a

new interest to every man's job. The subsidiary companies had been working out means of protecting men at work for many years, but the organization for the whole corporation dates from 1906, when the central bureau was established as a clearing house for ideas.

The result was the appointment of a committee of safety and the establishment of a bureau of safety—to which was added three years ago control of relief, sanitation, and welfare. I think the success of the measures has been very largely due to the method of organization, which divides and subdivides until the workman himself actually participates.

At the head is the bureau, which is the executive department of the committee of safety. This committee has one of the officers of the Steel Corporation as chairman; the seven other members represent the larger subsidiary companies. The bureau and the committee aim to circulate the best ideas of the whole membership of the organization in order that each plant may have the benefit of the ingenuity of all the other plants. Then come the central safety committees, which do for the plants of each subsidiary company what the main committee does for the whole body of companies. Each plant has its own plant safety committee, composed of important officers, below which is the department committee of foremen, master mechanics, and skilled workmen, and finally the workmen's safety committee, which is drawn from the rank and file.

These committees all meet regularly, some of them every week, and they make frequent inspections of their own and of other plants, with the sole idea of suggesting ways and means for the safeguarding of the work. Every accident is reported on a form which contains a space headed: "Suggestion for prevention of a similar

accident." These forms are tabulated and each plant has its score board to stimulate competition, not only between departments of the same plant, but also between the various companies. When no suggestion for the prevention of "a similiar accident" is made, the details of the accident are sent out to all of the committees and they are asked to suggest ways and means.

The same procedure is followed with new devices for safety or welfare. The workman himself has the chance to suggest what he thinks will best prevent a recurrence—it is put up to him. The membership of the workmen's committees is changed frequently, in order that every man may eventually pass through the stage of accident-prevention supervision; thereafter that man will be a part and parcel of the safety and the welfare system. More than eight thousand workmen have already served on these committees.

Without the active interest of the men most concerned, any safety or welfare measures will cause resentment and will therefore fail. We met this condition at the beginning of the work. Most of the superintendents and foremen had come up through the mills, and they thoroughly believed in the doctrine that every man ought to be amply able to look out for himself. They did not like the idea of someone interfering with their jobs, but we found they would work with zeal if the details of the new idea were put squarely up to them for solution.

Take a typical case in a carpenter shop. An order went out to install saw guards and with it a design for a guard. The superintendent received the new device with a contemptuous sniff.

"That thing isn't a guard. It will kill someone,"

he said. The safety-first man took him tactfully and replied:

"Well, Bill, you must have some kind of a guard. Make up a better one and I will send it out to the other plants."

And the new guard was made and it was the best guard for that shop because it was a home product. We have possibly twenty-five designs of guards now in use and they are all good. One man wants a mesh guard so that he can see the gears; another declares that the guard must be solid in order to keep out the dust and preserve the life of the gears.

The initial opposition once overcome, the difficulty has not been in regard to securing new safety or welfare devices, but in preventing useless or too costly installations. The men who kicked most at the beginning are the men who must now be watched so that their enthusiasm does not override their judgment. Every man, whether he receives wages or a salary, is eagerly enlisted and is anxious to come out with some winning idea. I have seen common laborers conferring with five-figure managers over the best way of avoiding some simple accident.

The bureau gives currency to every good idea. Thousands of ideas are being interchanged. Among those now under consideration are safety devices for ladders. We formerly had spikes and safety feet on all portable ladders, but accidents continued to happen. One of the plants made an exhaustive series of experiments with ladders bearing different weights and with various types of feet to determine the angles at which a ladder bearing the average man would slip. They found that the ordinary ladder was not safe on a smooth or oily surface if inclined at an angle greater than sixty de-

grees. They found that neither the spikes nor the safety feet helped matters and they recommended a plain ladder with a man holding it when the angle increased to sixty degrees or beyond. Now we are going to adopt a simple little device which will show the danger angle for ladders.

All of this costs money. The total cost of the measures for workmen for two successive years was \$7,240,669.33, and \$6,017,848.28. We are spending from a half million to a million dollars each year on accident prevention alone. Reduced to a per capita basis it amounted to \$2.84 one year and \$3.01, and \$3.32 each for the following years.

Does it pay? We think it does. An industrial enterprise must be so conducted that it shall earn enough to insure proper working conditions for its employees, to pay fair wages and to return a reasonable profit to those who have invested their money in it.

Our plans are large because our work is large. But the principle which guides us is equally applicable to the smallest manufacturer. The cost of pension, safety, and welfare work must be adjusted to the means of the owners. But, taking the initiative of the workmen as the foundation, the adaptation of the principle and its ramifications becomes only a matter of mathematics.



THERE are three important actors in production—the equipment, the systems employed, and the human element. It is more and more being appreciated that the human element is, in the last analysis, the one most important in securing the results desired.

LÜTHER D. BURLINGAME,
Industrial Superintendent, Brown and Sharpe
Manufacturing Company

XVII

GIVING THE MEN A CHANCE— WHAT IT'S DOING FOR FORD

By Harry Franklin Porter,
Organisation Engineer

MY FIRST introduction to the Ford plant and to Henry Ford was in the late spring of 1913. Although some of the most noteworthy developments in the short but eventful history of the Ford enterprise have taken place since that time, Henry Ford already was enjoying nation-wide distinction as a manufacturer. The annual convention of the National Association of Manufacturers was being held in Detroit and Mr. Ford was one of the guests at the banquet. When it became known that he was in the room, almost the sole topic of conversation at the outlying tables was Henry Ford and his methods.

A local manufacturer sat at my table and, as I personally was eager to learn more about Mr. Ford, I encouraged him to talk. He corroborated many of my previous impressions and filled in many interesting details. He was not, however, wholly laudatory in his remarks. As to the merit of Ford's mechanical methods he had nothing but praise. But as an employer of labor he criticized him. "He pays low wages and hires the cheapest class of help, mostly foreigners," was my table-mate's remark; "and," he added, "there is considerable feeling against him among Detroit manufacturers."

Just how much justice there was in this criticism I was unable to learn. I must confess that I was skeptical. I knew that one of the reasons for Ford's success was the extent to which he had carried the subdivision of labor, eliminating the necessity for any great skill on the part of many of his operatives. But I had also visited the plant and came away impressed with the excellence of the working conditions, the emphasis on good light, ventilation and sanitation, the provisions for safety, and the cheerful, busy atmosphere of the place. Therefore I was unwilling to believe that his methods as to men could be classed as retrogressive.

One of the officials of the Ford Motor Company, however, in a speech before the Indianapolis Chamber of Commerce, early in 1915, in leading up to an explanation of the Ford profit-sharing plan, made the following admission: "We, like other employers, had gone on for years, hiring men at the back door for as little as we could get them, putting them in the shop and making them work at the same job as long as they would stick, and not giving them an advance until we had to."

Then the tremendous wastes in this method of hiring and handling men began to dawn upon the Ford officials. They had not been exactly retrogressive in their labor policy, but they had unconsciously been following the line of least resistance. The result was that the number of five-day men, or "floaters," was very large. Some months it was necessary to hire new men to the extent of 55 per cent of the total payroll. When it is considered that the force comprised some seventeen thousand men, an idea can be had of the immensity of the task. The long employment line in front of the Ford plant had become one of the sights used to whet the curiosity of "rubber-neck" tourists.

Accordingly, a broad survey of the entire labor situation was undertaken. Other plants employing about the same number of men were visited, during the course of the investigation, but none with a better system was found. Nothing daunted, the Ford heads determined to solve the problem in their own way. In the grading of employees they found great lack of uniformity. This matter had been largely in the hands of the foremen. As a result, operatives in different departments, and even in the same department, were doing virtually identical work, but were getting widely varying rates of pay.

FORD finds out just how skilful a workman each employee is. Wages are based on these findings and the plan has proved mutually satisfactory.

The number of different rates, moreover, was entirely too large. Therefore, as the first step, a comprehensive classification of skill was worked out. This was as original as it has been successful.

All the work was found to fall approximately into six different groups, or classes, of skill. Each of these divisions, or groups, in turn was subdivided into three groups—the beginners, those of average proficiency, and the highly proficient. An additional grade was further established in some of the divisions, that of service, to reward the proficient men who had been in the employ of the company continuously for two years or over. Rates of pay were fitted in accordance. These finally were boiled down to eight rates, as against some sixty rates that were originally in force.

In no case was a man's previous rate cut. On the contrary, rates on the whole were graded upward, and, when several rates were condensed into one, the new figure was slightly above even the highest of the ones

it superseded. Rates from 52 to 58 cents, for instance, were condensed to 60 cents; from 46 cents to 50 cents, to 54 cents, and so on. The lowest rate per hour became 23 cents, for messengers and other miscellaneous special labor; the highest 65 cents, for expert tool makers and foremen in the service for two years or over.

Simultaneously the power of discharge was taken from the foremen and vested in a "court of appeal" working in connection with the employment office. Now, if a man fails to get along with his foreman he comes before this court, is carefully questioned, plainly talked to if at fault, and sent back to work in another department. Often it is a case of a "square peg in a round hole," and the man is shifted around until the work that he can do best is found. Of course, if a man shows, after two or three trials, that he hasn't it in him to make good, he is reluctantly let out.

The word "reluctantly" is used advisedly. It is difficult as things now are to get into the Ford organization, but once in it is perhaps more difficult to get out. The Ford Company wants its men to stay.

In addition to taking away the power to discharge from the foreman, systematic reviewing of the record of each workman was also inaugurated. If after the third pay day for a new man, for instance, no "raise slip" comes in, the foreman is sent for and asked why. If the man is entitled to promotion, but the matter simply has slipped the attention of the foreman, the latter is taken to task for his carelessness. He is also reprimanded if his failure to send in a slip is due to the man's inefficiency. He must not allow his department to be cumbered with a failure.

The toning-up effect of these measures can readily be appreciated. Men no longer are at a disadvantage

because they happen to have incurred the dislike of their foremen. They are stimulated by the fact that the company is taking a personal interest in their welfare, and the new classification of skill remedies many injustices in the wage scale. The foremen, moreover, are aroused to a new sense of their responsibilities.

What the tangible results of the various measures inaugurated to insure more substantial justice to the individual workmen were at the start are shown by the following figures:

	December, 1912	October, 1913
Five-day men	3,594	322
Men discharged	776	137
Men quitting	386	326
Men laid off.....	4,622	844
Total hired	5,678	1,789
Gain for the month....	856	954

The decrease in the number of five-day men, or "floaters," is particularly significant, since it indicates that permanency of the force was being achieved. The decrease in the number discharged also is noteworthy, and points to the success of the method of shifting men about until they make good, rather than letting them out on their first fall-down. The direct saving to the company through the greatly lessened employment expense was large, but the indirect saving through the greater efficiency of a reasonably permanent and contented working force, although more difficult to measure, was undoubtedly much larger. A decided decrease in the number tardy or absent was another result which had its financial compensations.

The striking fact is that Ford did not stop with these highly satisfactory results. The company was in a

highly prosperous condition, sales exceeding all expectation. The men were receiving ten per cent more for nine hours' work than men in similar lines elsewhere in the vicinity were receiving for ten hours' work. In addition, they were getting an allowance of ten cents a day for carfare. Thus apparently there was no exciting cause to do anything further for them, beyond a thoroughly aroused desire of the Ford Motor Company to share its prosperity with its employees.

Many plans were considered. The idea of raising wages still further was dismissed. Various profit-sharing systems were investigated and they seemed unsatisfactory. So, as before, the Ford management went to work and devised an original plan.

At one stroke the company reduced the hours from nine to eight, and added to every man's pay a share of the profits. The smallest amount to be received by any man 22 or more years old was five dollars a day. The minimum wage previously was \$2.34 for a day of nine hours. All but ten per cent of the employees at once shared in the profits.

Only ten per cent of the men were under 22, and every one of them had a chance of showing himself entitled to five dollars per day. The factory had been working two shifts of nine hours each. This was changed to three shifts of eight hours each.

In order that the young man from 18 to 22 years of age might be entitled to a share in the profits, he was required to show himself sober, saving, steady, industrious, and to satisfy the superintendent and staff that his money would not be spent in extravagant living. Young men supporting families, widowed mothers, younger brothers and sisters—upon this condition—were to be treated like those over 22.

This has been called a profit-sharing plan. But it is quite unlike other plans of profit division, nor does it conform to any orthodox definition of profit sharing. The fact that the workman's share is predetermined, does not wait on the earnings of the company at the end of the year, and involves no investment by the men in the stock of the company, marks it as unusual. But what makes the plan absolutely unorthodox is the additional fact that those who earn the smallest wages get the largest share of the profits.

The plan has come in for much criticism on this score. When asked to give his reason Henry Ford, in his quaint, Lincolnesque manner, replied: "Well, it costs a sweeper just as much to raise his family properly as it does a mechanic or anybody else, doesn't it?"

THE system used to regulate the high minimum wage paid. Plans for paying women workers. How Ford exercises an almost paternal watch over employees.

It should be understood that the \$5 a day is not a minimum wage. The rates of pay remain as before. But to each man's earnings is added a sufficient amount to bring his total reward to \$5. A man who formerly received 23 cents an hour, or \$2.07 for nine hours, now receives the same amount for eight hours: namely, \$2.07 plus \$2.93 as his share of the profits. The two sums are separately indicated on the pay envelope. The 44-cent-an-hour man receives \$3.96 plus \$1.04 for each day of eight hours.

Nor is \$5 the maximum. Those who before were earning from 38 to 48 cents an hour, or the first-class skilled operatives and mechanics in the beginning grade, may share in the profits to the extent of bringing their total daily earnings up to \$6; while those rated higher still,

up to where the salary class begins, may receive as much as \$7 a day. The 54-cent-an-hour man's share of the profits at that is only \$2.14, as against \$2.93 for the man rated lowest. Salaried men do not share, but are taken care of separately through a bonus plan which is equivalent.

At first the only ones barred from participation in the profits were the young men under 22, who had only themselves to support. Later it was found expedient to include in the non-participants all new men until they have been on the payroll for six months. The chief reason for this change was to discourage men in other plants from quitting their jobs in order to get the higher earnings possible in the Ford plant. But it also has its virtue as a means of testing the intentions of newcomers. If they stick it out six months at ordinary wages they usually have the necessary qualities to make them permanent members of the force. Again, it gives the company ample time to check up on their living habits and financial status, and—if these are undesirable—to improve them in the meantime until they come up to the Ford standards, so that there will be no doubt of the man's ability to qualify for participation in the profits at the end of the six months.

Further, in order to protect other plants, and to discourage the in-drift of men from other cities, the Ford Motor Company now will entertain as applicants only those actually out of employment and who have been bona fide residents of Detroit, or the vicinity, for at least six months.

At first the plan of profit division applied only to the shops. It has since been extended to include the office force as well. The Ford branches and assembly plants are on the same basis; and in both the Ford Canadian

A report sheet like this is made out for each employee in the Ford plant. In order to share in the profits, employees must receive a "clean bill of health" from the investigators on the various points shown above



Here is a typical row of Ford workmen's houses before any thought had been given to making the home life of employees more pleasant. Note the contrast between this picture and the one below



Paved streets, cheerful homes, and pleasant surroundings generally follow in the wake of the investigators who study living conditions and suggest improvements to Ford employees

and English plants similar plans have been put into effect, although the minimum is lower there, owing to the difference in the American and British wage scales. Women in the factory who are breadwinners—and there are several hundred—are treated precisely as men.

Women as a class, however, are not profit sharers. Instead, the company gave them a substantial increase in wages. The minimum now for a girl in the office is \$65 a month. In explaining this difference in the treatment of men and women, an official of the company said: "Women do not share because they are not, as a rule, heads of families. Also women, as a rule, are likely to throw up their positions at any time, without notice, for any reason that may happen to influence them, even temporarily. Few of them remain long with the company. Those who do remain several years, and come to be looked upon as reliable, steady employees, not infrequently make sudden announcements of their marriages and leave. For this reason they are not considered such stable economic factors as men. An advance in pay is considered more appropriate for them."

For the employee who is 22 years of age, and who has been on the payroll six months or longer, the sole disbarment condition is persistence in habits of life which fall short of the standard the Ford Motor Company believes essential in a decent, self-respecting American workman. While what a man is on the outside is reflected to a greater or less extent in his demeanor and the quality of his workmanship, the only practical way in which the company could check up in this respect was by personal visits to the homes. In a large measure the results attained by this organization is traceable to these visits.

So without pausing to debate the fine-spun, theoretical aspects of the act, as to whether an extension of supervision over the private life of their workers was unwarrantably paternalistic or not, the Ford Motor Company instituted a follow-up or "investigation" department and set about the huge task of visiting the homes of every one of its seventeen thousand and more employees.

The efforts of the Ford organization in this respect have borne remarkable fruit. It is, in my opinion, most practicable and effective social welfare work. It is espionage in a way, but of a totally different sort than ordinarily implied by this term. Ford exercises the closest supervision over the home life and financial affairs of his workmen. He does it, however, openly and frankly and for the purpose, not of taking something away from them or persecuting them, but in order to help them in the most practical way one man can help another: namely, by bettering his financial condition and then teaching him how to use prosperity to advantage.

MORE about the methods used to keep a close check on the home lives of Ford workers. How they are kept out of debt.

Much of the success of the plan has depended on the type of men Ford chose for his investigators. Men's private affairs had to be pried into, facts secured which in many cases required a high order of detective ability, and they had to be obtained quickly. Persistence, a deal of shrewdness, and an infinite amount of tact thus were requisite qualities in order to get results with a minimum of antagonism. Men, the slaves of all manner of bad habits, the victims of new-world vices and old-world standards of living, had to be made to see the

worth-while side of manly attributes and decent, clean home conditions.

Definite, measurable results are plentiful. Of the many families reunited; the drug and liquor addicts reformed; the criminally inclined who have been reclaimed; the debt-burdened families relieved; of the hundreds of children clothed and fed decently for perhaps the first time; the thousands of homes cleaned up and made livable; of the eleven or twelve thousand families that have been moved from the slums and undesirable, congested locations to outlying suburbs and country districts, most of them into nice little cottages of their own; of the tremendous increase in savings deposits, insurance carried, and payments on land and home contracts—of these and other concrete results of the Ford efforts in behalf of their workers, it would be possible to write in great detail. Perhaps the most striking evidence, however, is the way in which the investigators are received in the homes.

Henry Ford has been extremely interested in the foreign-born workmen, of whom there are some 52 nationalities comprising in number more than half his force. He feels he must shoulder his part of the burden of making them feel at home here, and of preparing them for speedy assimilation into our national life.

The very fact, however, that so many of the Ford employees were foreign born and non-English speaking, greatly complicated—at the start—the administration of the profit-sharing plan, and particularly the labor of the investigators. It was difficult in the first place to get them to understand the conditions. Many were the curious and incorrect impressions which it took a long time to eradicate. One idea, for instance, was that all a man had to do to qualify for a share in the profits

was to get married. Immediately, men who were wifeless took steps to remedy the deficiency, fairly or otherwise. Some hastily married, others persuaded or hired women friends or relatives to act as their wives, still others faked marriage certificates, asserting their wives were on the other side of the water. All these tangles had to be patiently straightened out, the men made to see the error of misrepresenting the facts and the unwisdom of precipitous matrimony.

Another impression was to the effect that if a man owned real estate he would get the profits, and for a time some real estate men reaped a harvest. By a singular coincidence, one man bought real estate on such an assurance and the very next day he went on the profit payroll. The news, of course, spread rapidly. As a result that particular real estate man signed up many advantageous contracts the next few days. Then the Ford officials got wind of the affair and through the legal department forced the real estate man to release every Ford employee unfairly inveigled into contracts. This and similar experiences led the company to undertake supervision of the men's legal affairs. A representative of the legal department now makes his headquarters in the employment department and the men are strongly urged, before entering into any real estate deals, to confer with him.

Other special purchases are supervised similarly. Many of the men were found to be debt ridden with instalment purchases. So the company frankly took up the matter with the various suppliers of household luxuries and got them to agree not to sign up a contract with a Ford employee until they had first conferred with the company and ascertained his ability to make good on his payments. The evil of garnishees

has been almost eliminated by similar cooperation between local merchants and the company. Before instituting legal proceedings the merchants are urged to take up the matter with the Ford officials, who usually are able to make some arrangement for the resumption of payments. To rid themselves as promptly as possible of all indebtedness, and to guard against becoming reencumbered is one of the lessons which the company, through its sociological department, endeavors constantly to hammer home to the workmen.

In passing, it should be mentioned that many of the little plans devised by the men to make themselves appear qualified for promotion when they really are not, such as the falsification of marriage certificates, succeeded temporarily. In practically every case, however, the Ford investigators eventually penetrated these deceptions. The company did not discharge the men so caught. If they did not voluntarily leave they were given a wholesome talking to about the need for truth telling on all occasions, and the lesson was made concrete by compelling them to pay back every penny falsely obtained. If a man refused to stay and pay the company took the matter to court and invariably secured the decision.

HOW *foreign-born workers are handled by Ford.*
Educational features that pay big dividends. A
comparison of results achieved by the old and new plans.

The large proportion of non-English speaking employees greatly hampered the investigators, for it required them to work through interpreters. Men competent to act as interpreters were hard to find.

The difficulties with men who could not speak, read nor write English, however, soon led the company to

organize for instruction in English. An experienced educator was called in. Under his energetic leadership, with a teaching staff of volunteers drawn mostly from the ranks of foremen, a class of over a thousand was graduated at the end of 37 weeks. At the present time approximately sixteen hundred men are receiving instruction. Two lessons a week are given. Attendance is compulsory for those who have registered.

Within a very short time after the inauguration of the plan there was a voluntary increase of from fifteen to twenty per cent, in spite of the fact that each man worked one hour less. On the fourth of February, 1913, with 16,000 men working ten hours a day, the company made and shipped 16,000 units of its product. The same month, one year later, after the new plan had been in effect a little over a month, with 15,800 men working eight hours a day, it made and shipped 26,000 units. At the present time, with approximately 18,000 workers, it is producing at a rate of over 40,000 units a month.

Some of this gain, it is true, has come about through improved methods, but much of it has been due to the increased interest, loyalty, and efficiency of the force. Working less hours a day, the men are able to sustain a higher rate of output each hour. Reasonably certain of the permanency of their employment and happy in the knowledge that they are gaining on the rising cost of living, they are rid of fear and worry.



EVERY business needs to develop the personality of its men, for that means individualism, originality, growth, and progress.

GEORGE H. BARBOUR,
President of the Michigan Stove Company

XVIII

HELPING EMPLOYEES TO SAVE

By Stanley A. Dennis

Based on an Extensive Investigation

WHAT is the best way for an employer to go about establishing a cooperative savings and loan association among his workers? If he is to profit by the experience of many companies, he will recognize first of all that certain principles underlie a successful association.

These principles have been widely recognized in recent betterment work. They have been well stated by Dr. Edward E. Pratt, chief of the Bureau of Foreign and Domestic Commerce. He says: "These principles are: (1) that a man's best security is his fellow workmen's estimate of him; (2) that to provide facilities merely for borrowing money may encourage improvidence and that any real solution of the problem must encourage thrift instead; (3) that an organization among workers will be self-advertising; (4) that the workers themselves are most capable of meeting properly the needs of their fellows."

Successful associations are maintained, among others, in the following companies: The New York Edison Company; The William Filene's Sons Company of Boston; The Ford Motor Company of Detroit; The Celuloid Company of Newark; The Northern Trust Com-

pany of Chicago; The Chicago Tribune; Sprague Warner and Company of Chicago; Carson, Pirie, Scott and Company of Chicago; The Curtis Publishing Company of Philadelphia; The Larkin Company of Buffalo; The Joseph and Feiss Company of Cleveland; and The Gorham Manufacturing Company of Providence. Many others could be named.

These associations are for both saving and lending money. Several well-known companies for one reason or another maintain savings associations only. Certain details of organization are, of course, similar in all of the associations. While the ends obtained are almost identical, the means will be found to vary in as many different ways as there are different conditions to be faced.

A CONCRETE plan for organizing a cooperative savings and loan association, with every employee as a member. *Why control should rest with the workers.*

When you have gone through your list of problems and conditions and analyzed each, either alone or with the assistance of a few picked men, appoint "a committee to assist in founding a cooperative savings and loan association" with every member an employee. If your company maintains a service or welfare department, or a club for the advancement of the employees' interests, let the club appoint this committee. In conference with this committee, look at the whole problem from the point of view of the worker. Get his approach, his "angle," his ideas and suggestions.

Combine the results of your preliminary study with the new ideas and proposed methods obtained in conference with the workers. Make up a tentative committee report which will include a set of by-laws, if

the association is to be a part of a larger employees' club, or a constitution, if no organization exists. Run off mimeographed copies of the tentative report. See that a copy goes into the hands of every employee. Ask for criticism and suggestions. Give him a week to think about them. Give him a loosely drawn up "ballot" to fill in and extend. Let him drop this in a conveniently placed box.

When suggestions come in, they can, if thought advisable, be worked into the final report of the organization committee. In this way every employee gets a voice in organizing the association. It represents his work, his thought, his time. It wins his interest at the start and is likely to win his loyalty more quickly than if he first saw the plan of organization in final form. Best of all, this kind of cooperation puts into motion a self-advertising campaign among the employees themselves.

The final step is the adoption of the revised report by the employees, and the election of officers as provided in the by-laws or constitution. When this is done, direct control of the association passes into the hands of the employees themselves.

These steps that have just been discussed form, in a general way, the plan usually most successfully followed when establishing an association. Looking more closely now, in the organization scheme, into the actual making of the by-laws or constitution, certain questions demand special attention.

Perhaps the most important problem is the question of limitations as to membership, deposits and loans.

In many associations, deposits are annually limited to a certain sum. In others, only a certain annual deposit can share in any distribution of profits, but any excess may be carried in the fund.

In regard to deposits, there is a wide range of practice. In the simplest form the employee agrees to "purchase," say, ten shares at a par value of twelve dollars each. This would make his annual savings \$120 payable in weekly, semimonthly or monthly instalments.

Local conditions must govern the size of a share and the number "purchasable." The maximum participating annual deposit should be within reach of the lowest-paid employee, if possible, or at least held down so that high-salaried employees may not take the larger share of the profits.

Depositor <u>Mary Foster</u>			
WEEK ENDING	DEPOSIT	FINE	RECEIVED BY
June 6	-.50		<i>A. Claude Jones</i>
" 13	-.25		<i>A. Claude Jones</i>
" 20	-.75		<i>F. P. Smith</i>
" 27	-.50		<i>A. Claude Jones</i>
July 4		-.05	
" 11	-.75		<i>A. Claude Jones</i>
" 18			
" 25			
Aug. 1			
" 8			
" 15			
" 22			
" 29			
Total, \$ _____			

FORM I: This card serves members of The Celluloid Company's savings association as a pass book. A record is made of both fines and deposits. Deposits for six months can be quickly deducted. The deposit dates are printed on the card

Non participating excess deposits serve the purposes of the man who wants to save a larger sum, and at the same time patronize the association. The New York

Edison Company's association provides for what are called instalment shares, savings shares, juvenile savings shares, accumulative prepaid shares, and income shares. Each kind has its particular purposes and advantages. Shares differ greatly in size and number per employee. Usually a maximum number that can be subscribed is set, sometimes a minimum, and sometimes no limits are fixed.

In the successful association of The Celluloid Company, deposits of twenty-five cents or more weekly—no limit—are accepted. A fine is imposed for failure to deposit as agreed.

DETAILS of successful "banking" conducted by many firms for employees. How thrift is encouraged and workers kept out of minor financial troubles.

Periods of savings are of six months duration and are known as "series." Profits are distributed only on savings of one dollar or less weekly. The savings branch is successful largely because an employee can deposit his money in convenient boxes on pay day. Automatic collection from the payroll, at the request of the employee, is also followed in many cases.

In the Joseph and Feiss Company the head of the service department induces parents to permit their children to retain a fair share of their earnings and to deposit them in the "Clothcraft Penny Bank." This bank has proved an invaluable aid in building up the effectiveness of the workers, most of whom are young women. The shares are of sufficient value in some cases to assist the depositors in building and paying for their own dwellings.

In regard to withdrawals, the practice is to exact a small fee when funds are withdrawn on any date

APPLICATION FOR LOAN

Savings and Loan Association

of the Employees of the
Chicago & North Western Ry. Co.
General Offices

Chicago June 18 1917

I hereby make application for a loan in the amount of \$ 15.00

for thirty days, due July 18

Account No. 975

Department Collection

Salary \$ 120.00 Amount paid in \$ 26.50

Previous loan this month no

My residence address is 4136 Coanville Ave.

I hereby declare my intention of remaining in the employ of the Chicago & North Western Ry. Co.
Should I sever my connection with the said company, I will give immediate notice before so doing
to the secretary of the above named association.

It is distinctly understood that loans will be made only to the amount of \$15.00, plus the amount
of said applicant's deposit in shares with association, upon approval of Secretary.

Loans in excess of the amounts as fixed by the above rule can be had only in emergency cases, satisfactorily
explained to the Executive Committee, and only on security approved by the said committee.

Name of Guarantor Wayne Martin

Approved { Joe H. Ford
Walter Christiansen
Banning Murphy } Executive Committee

Chicago June 18 1917

To the Treasurer of the
Chicago & North Western Ry. Co.

For value received, I hereby assign to the Savings and Loan Association of the Employees, the sum
of \$ 15.00, and I hereby authorize, order and direct you to deduct said
amount from any money due me on the pay rolls for the month of July 1917
and pay to the Treasurer of the Savings and Loan Association of the Employees

Signed Arthur Fox

Dept. Collection

Approved Frank Smith

Director

FORM II: Frequently the routine work of association is handled by an employee during spare moments. It is important to make the task as simple as possible. This loan application devised by the Chicago & Northwestern Railway Company meets the need of simplicity admirably

except on a set date. No charge is made when deposits are taken out to pay off a loan or when illness or a "lay off" is the cause.

In the Filene association, deposits in any sum, from five cents upwards, are received. The depositor is not required to leave his money on deposit for a given length of time, but he agrees not to withdraw it until it reaches a stated amount. Partial withdrawals are not permitted, as this would necessitate a check system.

Loans are now made quite generally "on character." This conforms with the first principle laid down previously. Mr. S. T. Simmonds, manager of The Celluloid Club, says: "The complete failure of any scheme whereby money was to be loaned on character and unsecured was freely predicted. All business men consulted thought it would fail. These gentlemen now confess to being most agreeably disappointed."

Other associations lend up to a certain limit on no security. An application for a loan often takes the form of a promissory note.

Unsecured loans vary in size much as the shares do. On this point, Mr. Simmonds says: "An employee's record as an employee is mainly what determines whether the loan is granted or not. In the Celluloid association, depositors may borrow in sums of from one dollar to two hundred dollars. The amount of deposit bears no relation to the sum that may be borrowed, except that no loan of more than ten dollars in excess of a deposit will be granted to a minor without the written consent of parent or guardian. For sums above twenty-five dollars endorsement is asked."

No interest is asked on loans in some organizations. In others, interest charges run from one-half of one per cent per month, or six per cent per annum, to one

per cent per week, or fifty-two per cent per annum. Other associations have a set scale of charges, as, for example, 15 cents on \$2.50 for two weeks or less; 20 cents on \$5.00 for the same period; 25 cents on \$7.50, and so on.

Repayment may be provided for on a set date as in the case of a note, or by weekly or semi-monthly or monthly instalments. Failure to pay as agreed often prevents a second loan. Profits are obtained from charges for loans, withdrawal fees, income on investments, and fines. In some cases the company borrows the balance above outstanding loans and pays a stated rate of interest. Where profits are derived from the four sources just named, associations frequently pay dividends at the end of the "series," or year, equal to ten per cent or more of the deposits.

Expenses, of course, are deducted before the profits are distributed. To encourage thrift some profit is necessary, but it is naturally not considered good policy to encourage borrowing in order to increase the profits! All investments of deposits are ordinarily handled by a board of directors. The usual officers are a president, vice-president, secretary, and treasurer.

Turning now to the general aspects of the question, perhaps it is not too much to say that hundreds of business concerns have tried to find some practical method of helping employees financially, and for encouraging thrift among them. Numerous philanthropic societies have given their assistance. Several states have by restrictive legislation, and a few by constructive legislation, aimed to meet the needs of the small borrower and end the abuses often perpetrated by petty money lenders.

The remedies offered range from Christmas savings

clubs to co-partnerships for employees. Profit-sharing, pension plans, and sick and death benefits each serve a special purpose in industrial betterment work, but they are not intended primarily to promote thrift and assist unfortunate workers in their petty financial needs day in and day out.

The Celluloid Club Saving and Loan Department	APPLICATION FOR LOAN.	
	Nowack, A. J., Feb. 16, 1916 Loan No. 384	
	I herewith apply for a loan of Twenty Dollars	
	for three months weeks (\$20.00)	
	I promise to deposit at least \$2.50 weekly till loan is repaid	
	Applicant Ford McMaster Dept Correspondence	
Recommended by T. P. Simpson		
Endorsed by Oscar Olsen		
Date Due April 16, 1916 \$2.00		
Amount on deposit \$14.00 Paid No. 127		
Borrower MUST deposit weekly, the amount stated on this application.		

FORM III: This is the loan application form used by The Celluloid Company's association. It is a rule with this association that payments towards discharging loans be made weekly, in order that borrowers may get out of debt as quickly as possible

Private and state attempts to solve these difficulties have resulted in the organization of such bodies as the Workingmen's Loan Association of Boston, the Provident Loan Society of New York, and the First State Pawnors' Society of Chicago. These organizations keep their charges small and equitable and are devised so as not to take advantage of an unfortunate borrower.

One serious objection to these organizations is, possibly, that only he who has security to offer may borrow. The Boston association loans on chattels and the New York and Chicago societies on pawns. Also, they solve only the borrowing half of the worker's problem, not the

savings half. Another objection is that the worker is only a patron and not a partner in the business.

Likewise, the practice of reputable business concerns in lending to deserving employees on ample security is perhaps open to objections. This plan does not help the man who has no security to offer and it does not create thrift and build up savings accounts among the entire force.

Of deep significance is the fact that where the state and the philanthropist have evidently failed in a large measure, the employee himself has succeeded. The survey of fourteen widely known industrial organizations—the betterment activities of which cover 140 years of experience—that underlies this chapter indicates that the plan already discussed, a cooperative savings and loan association, is probably the best means of keeping the worker out of minor financial troubles.



GRADUALLY encouraging men to undertake more and more difficult work, leaving them to work out the difficulties, but at the same time directing and guiding them in a way not too helpful, is good and beneficial. Helping in the wrong way, that is to the extent of practically doing the task or the man, only weakens him, and instead of his being strengthened and benefited by the discipline and exertion of overcoming the obstacle in his path, he is actually left by your ill-advised help a weaker and less able member of the organization.

E. M. HERR,

President, Westinghouse Electric and Manufacturing Company

XIX

YOUR RIGHT IN YOUR EMPLOYEE'S INVENTIONS

By. Joseph W. Hays,
Combustion Engineer

WHEN an employee of mine makes an invention, what rights have I in that invention? This is a question the answer to which every manufacturer needs to know, for large interests may depend on it.

Consider the case of a certain New England factory. At a cost of thousands of dollars this concern acquired the patents covering an automatic machine. At a still heavier expense the factory was equipped throughout with these machines. The concern rapidly put itself in the way of obtaining a monopoly in its particular line of manufacture.

Competitors were in despair. The new machine so reduced the cost of manufacture that in order to stay in the field at all they figured they would have to do business below cost. It requires a lot of sand, sentiment and dollars to do business in that way.

The factory with the new machine felt very secure in its position. Its patents were considered unassailable. Mechanical experts had passed upon the machine and pronounced it almost perfect. None could think of any way in which the machine could be improved or paralleled.

But ingenuity, as the event proved, found a method

of defeating the purposes of even this highly-developed machine. The concern had in its employ an expert mechanic whose duty it was to keep the automatic machines in order.

He was a man who always kept his eyes open and his wits in working order. He combined—in addition to having the knowledge necessary to the working of his craft—the initiative and ingenuity of the inventor. It can easily be supposed that every factory is liable to have men of this type on its payroll. The wise employer cultivates them.

Now this particular mechanic also combined common sense with his inventive faculty. He reasoned as follows: this automatic machine exists for the sake of its product. The product is therefore of more importance than the machine. I see no way in which the machine can be improved. Can I improve the product? He set to work and did improve the product, which was, and still is, something in common use by all classes of people. He found the weak points of the article and by a slight change in construction eliminated them. He added three new features which gave the improved device instant popularity when it was finally introduced.

Without changing the functions of the article, he so changed the article itself in working out the improvements that the automatic machines in his charge could not make it. Neither could they by any modification of design, or the addition of any attachments, be made to produce it. The improved device called for an entirely different automatic machine.

As is the case with most real improvements, the new article was much simpler than the old one. The inventor designed also an automatic machine to make it, and this in its turn was relatively simple and inexpensive. He

estimated that the factory cost of the new article would be just a little more than half that of the old one. Unlike most preliminary estimates of this kind, his figures were more than realized.

The man was more than a good inventor. He was blessed with a business instinct that taught him how to look out for himself. He applied for patents both upon the article itself and his machine for making it. Then he held the fate of his employers' business in his hands.

WHY it is to the interest of the employer to secure the ownership on a fair basis of valuable inventions by his employee and how he may do this legally.

Now, this mechanic may or may not have been *morally* bound to give his employers a chance to purchase his inventions. The opportunity of invention came as an incident to his employment. The ideas came to him through observation of his employers' products and machines, and during the hours when all of his thought and energy belonged to his employers. But, as a matter of fact, he did not offer the patents to his employers.

He went to their chief competitor instead. This was a good business move for him. All the competitors were in deep water, and he felt that his best chances lay with the strongest among them. He made his own terms; and in less than two years his old employers were forced to sell out, at a great loss, to the firm that had bought his patents.

It is to the interest of any manufacturer, therefore, to secure the exclusive ownership of valuable patents that are taken out by his employees and are in the least connected with his line. A liberal policy of remuneration not only stimulates invention, but it also encourages

the inventor to put the results of his skill at the disposal of his employers. A contract can be drawn up with each employee, by which he agrees to assign all inventions which he may make during the term of his employment.

“But an agreement of this character must be unequivocal, and can not be implied from a general bargain for his time and skill and labor, nor is it proved conclusively by the fact that the experiments resulting in the invention were made at the request and expense of the employers. . . . An agreement of this nature relates only to the period of service, and inventions made prior to that period or after its expiration belong to the employee and are patentable by him alone.” (Robinson on Patents, I, 584.)

A contract of this sort is not the same as an assignment, though it is valid as a contract and can be legally enforced. Every employee who is in a position to invent anything—either machine or product—is required in certain concerns to sign such a paper on entering the concern’s employ.

In the absence of a contract, an employer may find himself in the same position as the owner of the automatic machine mentioned above. The courts take care to protect the actual inventor.

The act of invention does not consist in the actual working out of the conception of a method for doing a thing, but it does consist in the conception itself. Therefore, if an employer has an idea for an invention, he can safely employ a mechanic to work out the details and perfect the invention, simply suggesting to him the principal working parts of the apparatus and the relations of these parts to each other. In the eyes of the law he is still the inventor, even though the mechanic

through his skill is able to improve upon his employer's plan.

In a decision handed down many years ago in the Supreme Court of the United States, the following principle was enunciated:

"No one is entitled to a patent for that which he did not invent unless he can show a legal title thereto from the inventor or by operation of law; but where a person has discovered an improved principle in a machine, manufacture, or composition of matter, and employs other persons to assist him in carrying out that principle, and they, in the course of the experiments arising from that employment make valuable discoveries auxiliary to the plan and preconceived design of the employer, such suggested improvements are in general to be regarded as the property of the party who discovered the original improved principle, and may be embodied in his patent as part of his invention." (Agawam Company vs. Jordan, 7 Wall., 583, 603.)

The principle has been upheld many times. Bernard, in one case that reached the courts, was a salesman with a company that made a business of jobbing novelties. Among other products, the company sold a soap and sponge holder. This device had been patented by a mechanic named Huebel, who was a partner in a small manufacturing firm.

IMPROVING on an invention does not usually constitute a legal claim for a patent. Plans for stimulating the worker with an inventive turn of mind.

Bernard, in discussing the article with a customer, discovered certain objections to it. He conceived the idea of a new device which would overcome these objections, and went to Huebel to explain his idea and have

the details perfected. He gave him a rough sketch of what he had in mind, but did not describe his proposed construction in detail. Huebel went ahead and made the new soap and sponge holder, and claimed the patent.

But when suit was brought, the judge held that the patent belonged to Bernard, notwithstanding the fact that the perfection of the finished article was partly due to the skill of Huebel. The decision stated that the mechanic "must invent something, not merely improve by the exercise of his mechanical skill upon a conception which he has been employed to work out." (Huebel vs. Bernard, C. D., 1900, 223; 90 O. G., 751.)

It will be apparent on reflection that these distinctions between the man who conceives and the one who executes are based upon sound principles of equity. Without these distinctions, no one but a skilled mechanic could be an inventor in many lines.

To be valid, a patent must be issued to the original, first and sole inventor of the improvement. It is, therefore, very essential that the application should be filed in the name of the person who, in the interpretation of the law, is in fact the actual inventor.

Some companies take out all patents in the name of some executive, regardless of who originated them. This is not in accordance with the law, and, moreover, it is a dangerous practice. If it can be shown that such an executive is not at law the inventor, the patent may be invalidated. The real inventor could make a second application within two years from the date that the invention was first disclosed to the public. A second patent would then be issued and the courts would be compelled to declare the first one void.

It is incorrect to assume that the question of patent rights is settled by the issuance of the patent. The

question is never settled so long as there are adverse claimants. This may or may not be a defect in our patent laws.

Serious injustice has sometimes been done to inventors through the suits of fraudulent claimants. On the other hand, the same means has often operated to protect inventors. It has enabled them to secure justice where their ideas have been stolen and patents wrongfully issued to improper claimants.

The form of contract in regard to inventions which the employer enters into with his employees should provide for an assignment to the company of all inventions he makes that relate to the business of the company, irrespective of whether or not the inventions are made in the factory, or at whose expense they are produced.

The Supreme Court of the United States has held repeatedly that a contract is absolutely necessary to enforce a patent assignment. A government employee invented a self-cancelling revenue stamp and patented it. He made the invention on the government's time and with its materials and workmen. The court held that the employee was entitled to the patent, but that the government had a "shop-right" to make and use the stamp.

Every invention suggests the possibility of future litigation. It frequently happens that the same improvement is conceived simultaneously and independently by two or more inventors. It may then become necessary to determine who was in fact the first inventor. To this end, as much documentary evidence as possible should be accumulated that tends to fix the date of the invention.

If an invention is suggested to the employee by the employer, a sketch can be made, dated and signed by

the employer as the inventor. Witnessed and filed away, it can be used in case of future contest.

In like manner the employee should execute a sketch when he has conceived an invention. This should also be signed, dated and witnessed and filed by the employer. As the work of development proceeds, additional sketches may be made, showing the progress of the invention toward reduction to practice.

Many factories award a prize each month for the best suggestions made by employees. This is an excellent plan, because it makes the employee think about his work and take an interest in it.

When such is the case, inventions often occur in most unexpected ways. The story is told of the textile design known as "water tabbies," which owed its origin to accident, or, perhaps, to an instantaneous conception.

A workman, having spat on the floor, put his hot iron upon it, and observed that it spread into a kind of flower. He afterwards tried the experiment upon fabric and found it produced the same effect. He then obtained a patent, and lived to make a comfortable fortune. (Robinson on Patents, I, p. 127.)



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IT IS the elimination and utilization of waste, waste effort, waste time and material, the minimizing of destruction and damage, wear and tear, that produce the great results in the industrial world. There is no magic in these accomplishments. The leaders in action or thought are not magicians but steady, persistent workers."

THEO. N. VAIL,

President of the American Telephone and Telegraph Company



